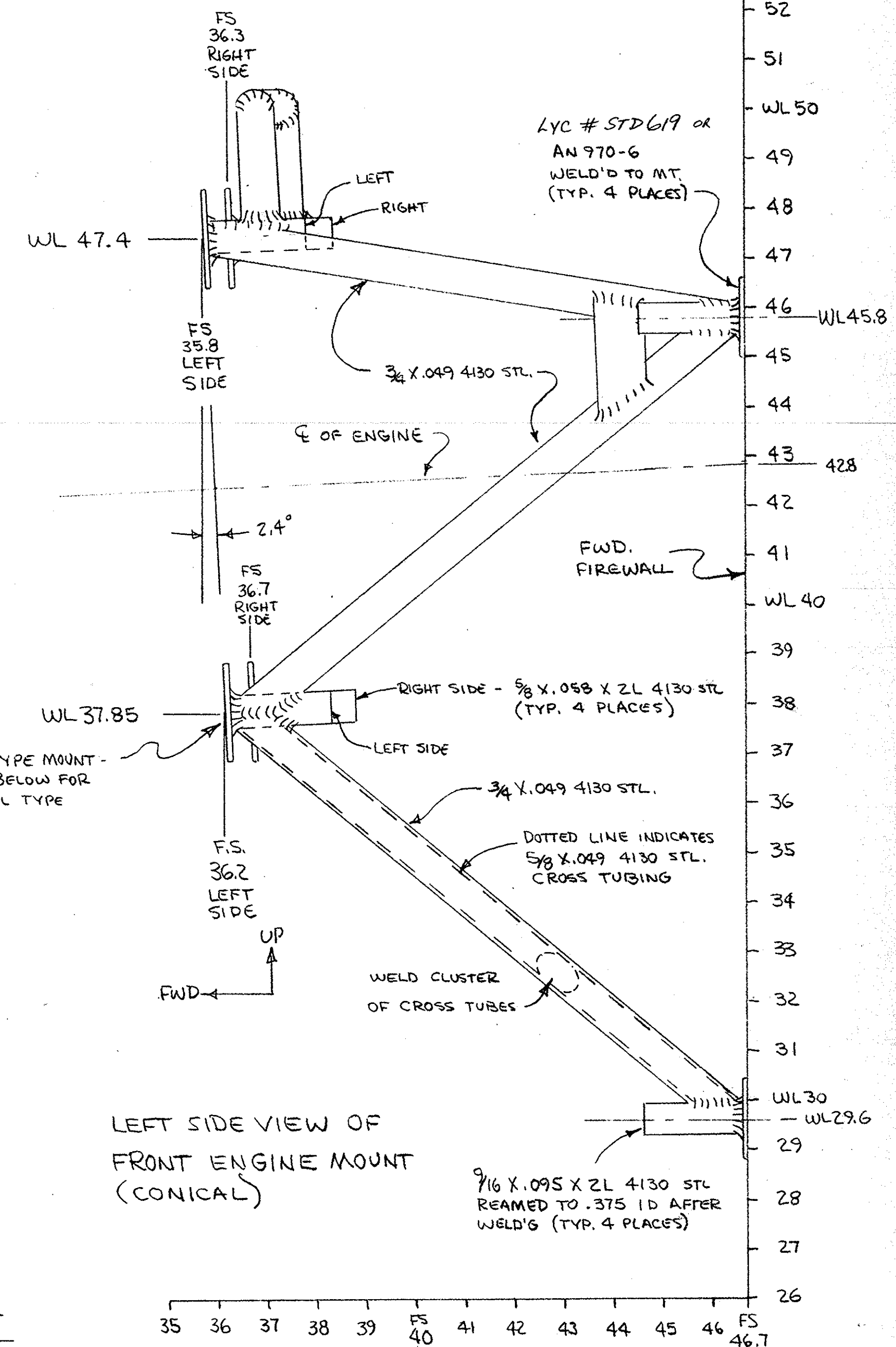
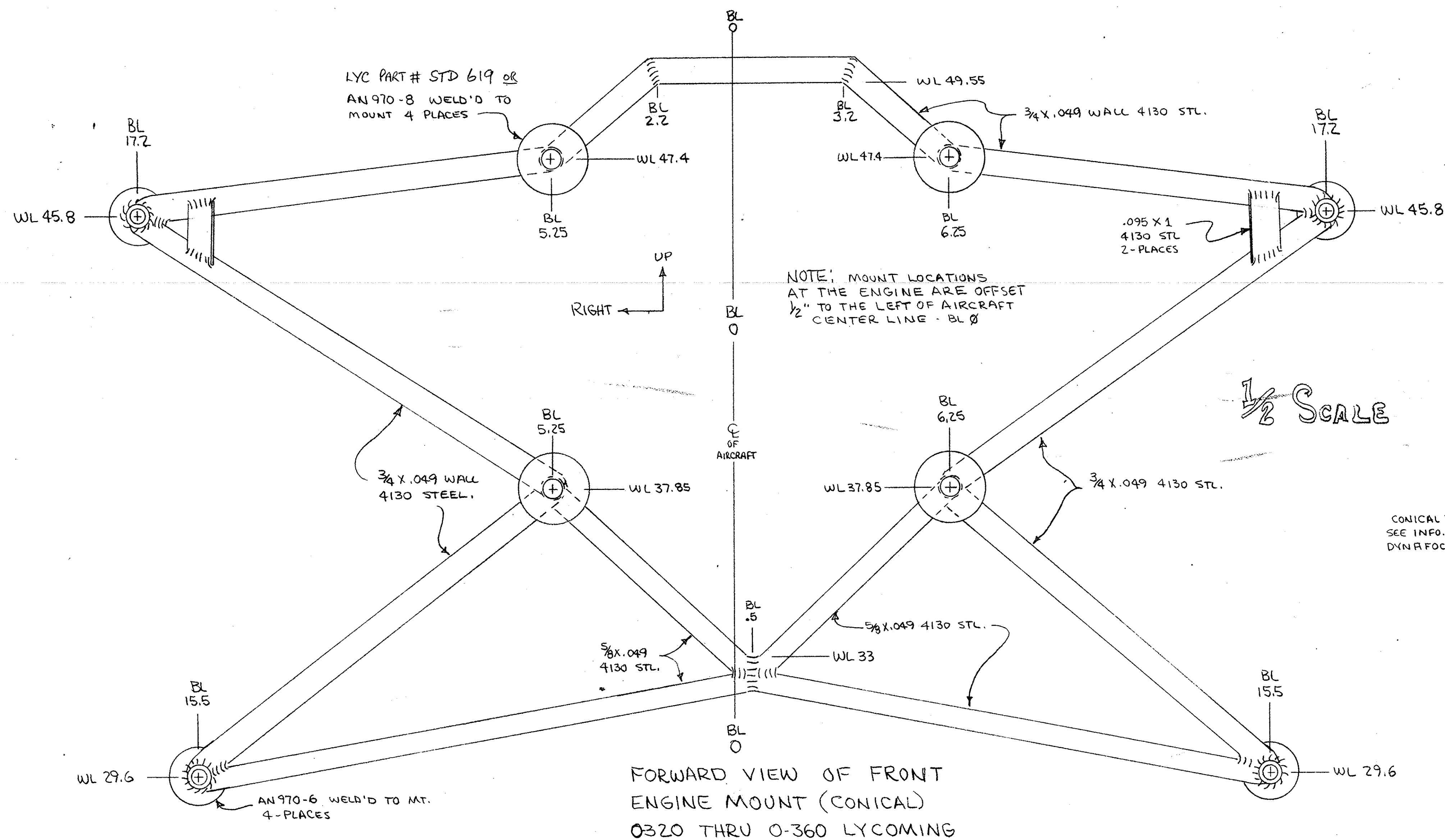
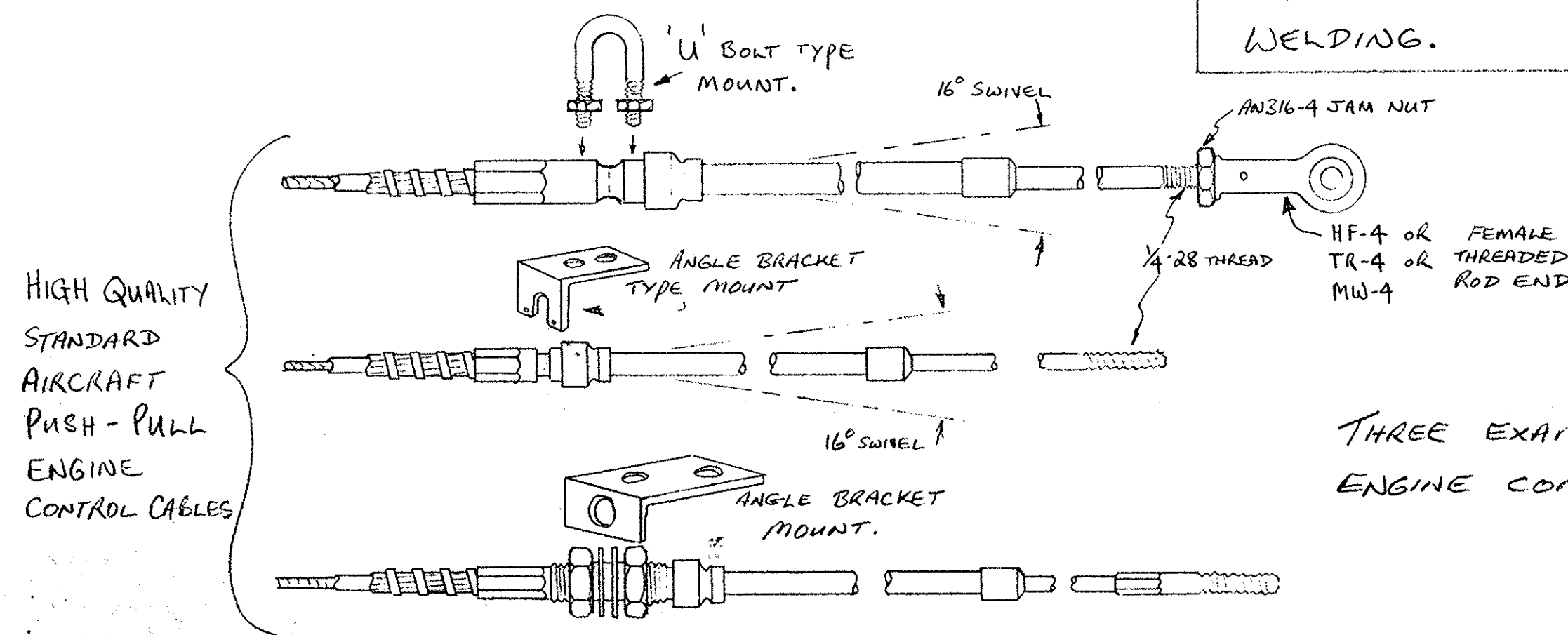




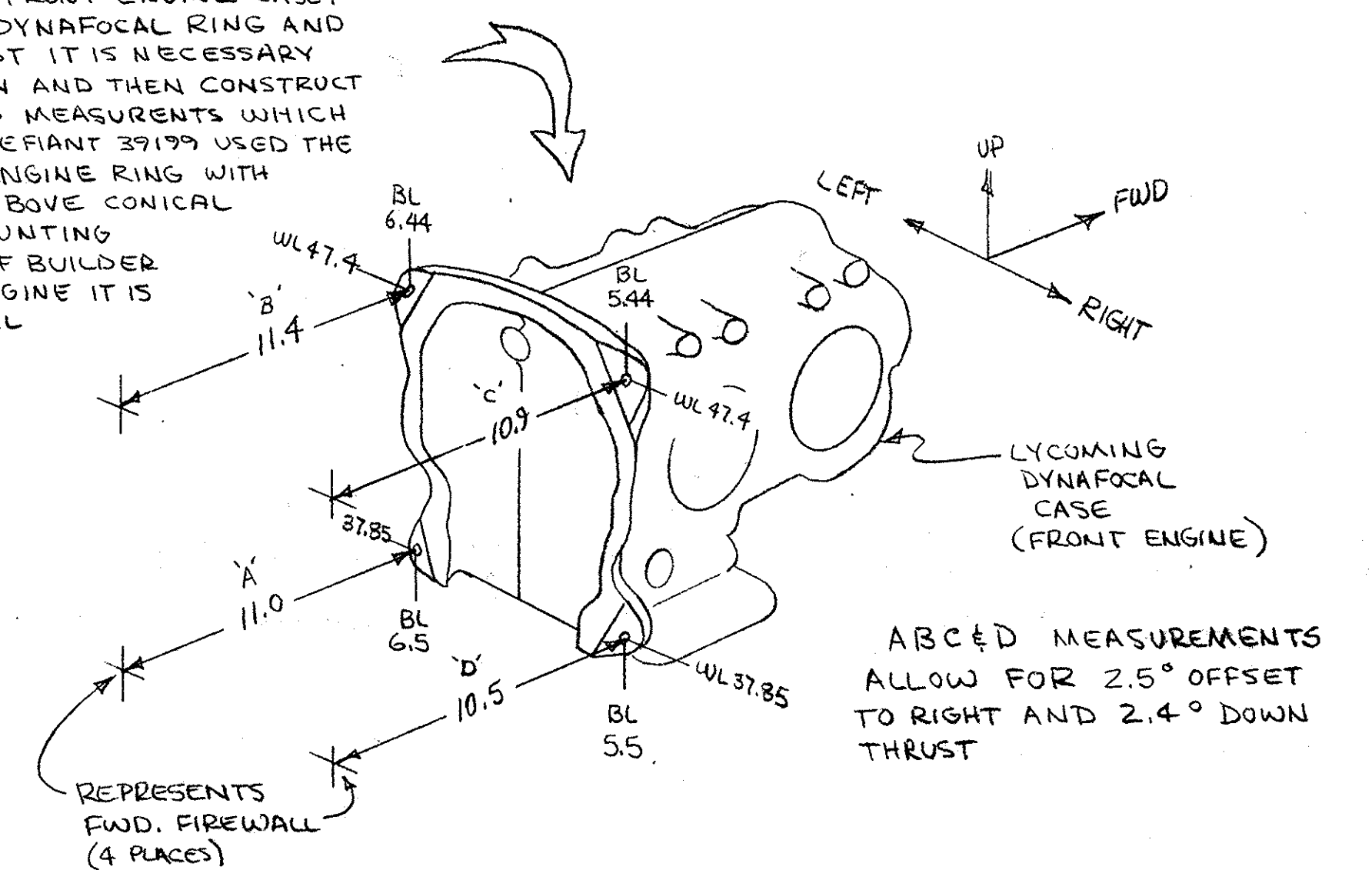
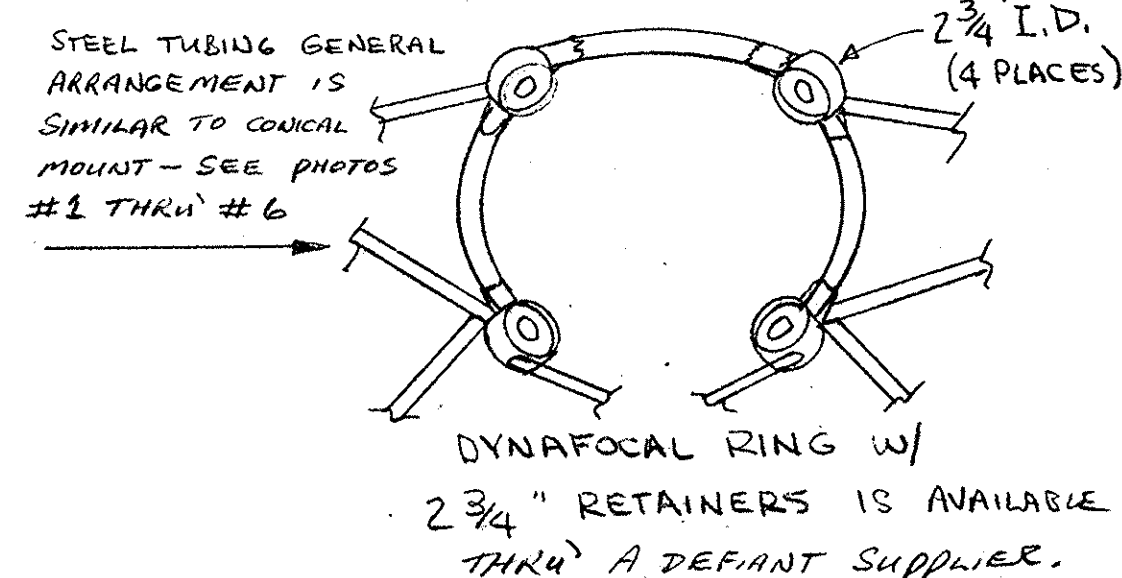
CAUTION! IF YOU ARE USING LYC. 0-360 (180HP) ENGINES WATCH FOR INTERFERENCES BETWEEN THE OIL PAN, OR ACCESSORY CASE, OR FUEL PUMP AND THE 'X' CROSS TUBES IN THE LOWER PART OF THE ENGINE MOUNT. TRY THE MOUNT ON THE ENGINE BEFORE FINAL WELDING.



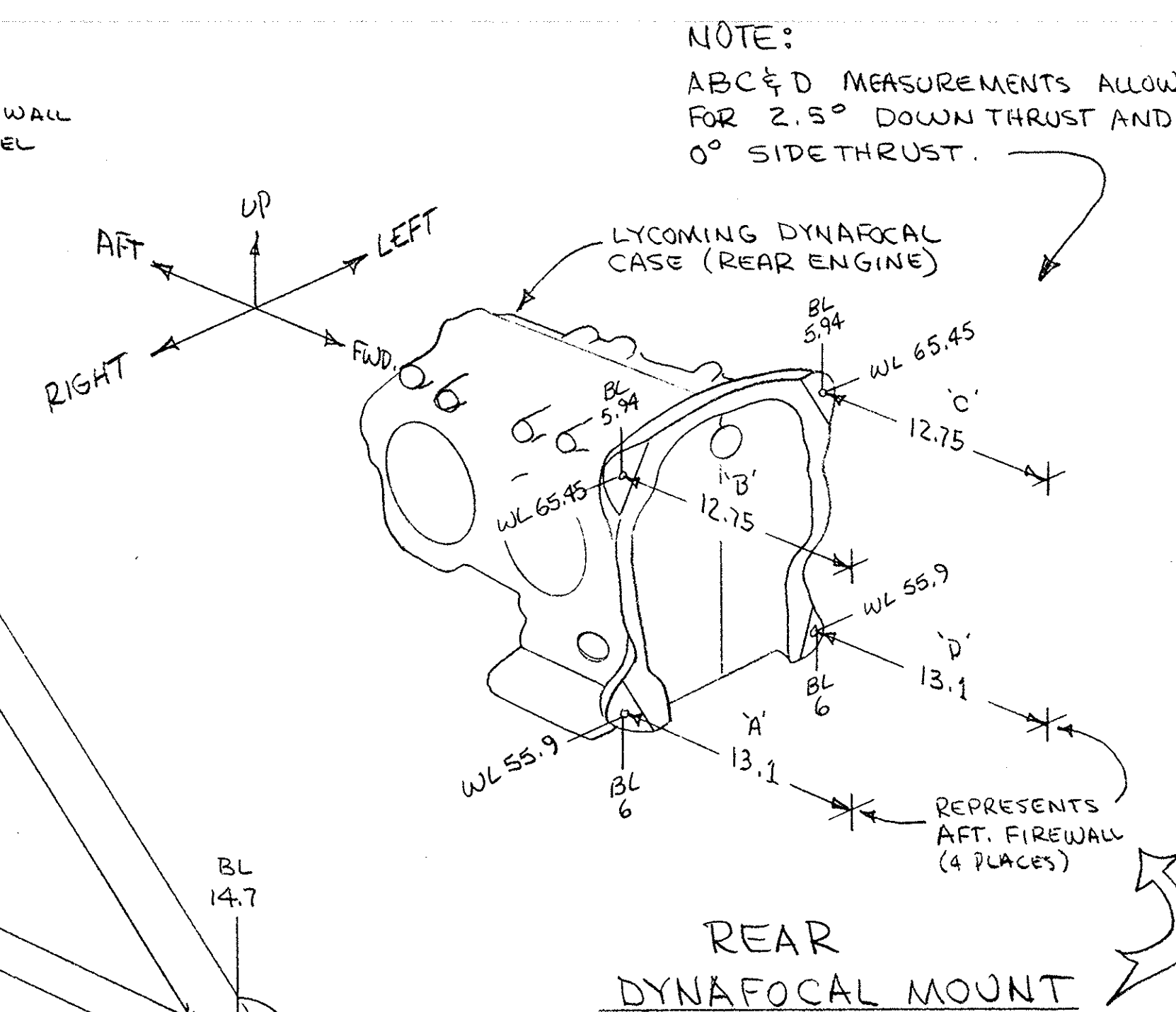
THREE EXAMPLES OF AIRCRAFT ENGINE CONTROL CABLES.

FRONT DYNAFOCAL MOUNT

MEASUREMENTS ABC & D ARE DISTANCES FROM FRONT FIREWALL TO THE CENTER OF EACH DYNAFOCAL MOUNT HOLE ON THE FRONT ENGINE CASE. BECAUSE SEVERAL DIFFERENT DYNAFOCAL RING AND LORD MOUNT COMBINATIONS EXIST IT IS NECESSARY TO OBTAIN A DESIRED COMBINATION AND THEN CONSTRUCT MOUNT USING SELECTED RING AND MEASUREMENTS WHICH POSITION ENGINE AS SHOWN. DEFANT 39199 USED THE 2 3/4" I.D. RETAINER DYNAFOCAL ENGINE RING WITH APPLICABLE LORD MOUNTS. USE ABOVE CONICAL INFORMATION FOR FIREWALL MOUNTING LOCATIONS AND TUBE SIZES. - IF BUILDER HAS 1 DYNAFOCAL & 1 CONICAL ENGINE IT IS RECOMMENDED TO USE DYNAFOCAL ON FRONT OF AIRCRAFT

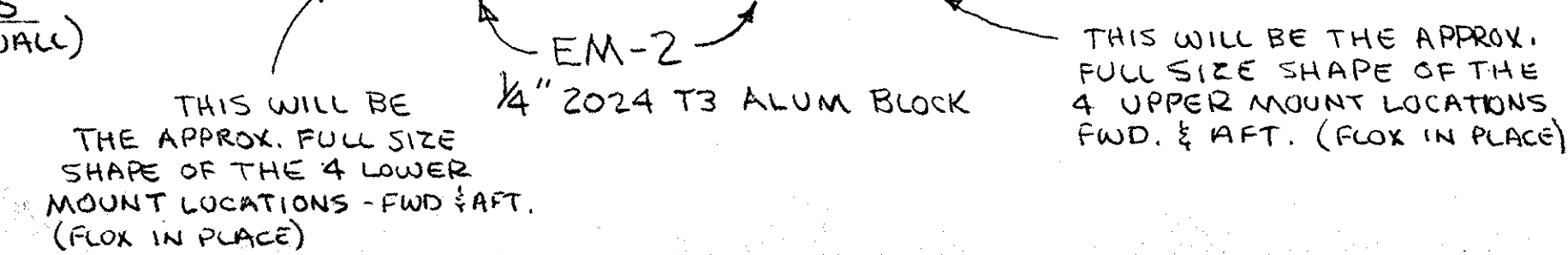


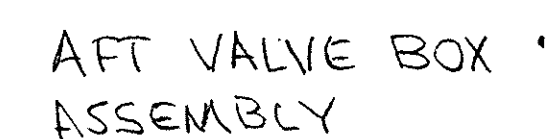
NOTE: ALL LYCOMING ENGINE 0-235 THRU 0-360 CASES HAVE SAME DYNAFOCAL MOUNT HOLE DIMENSIONS



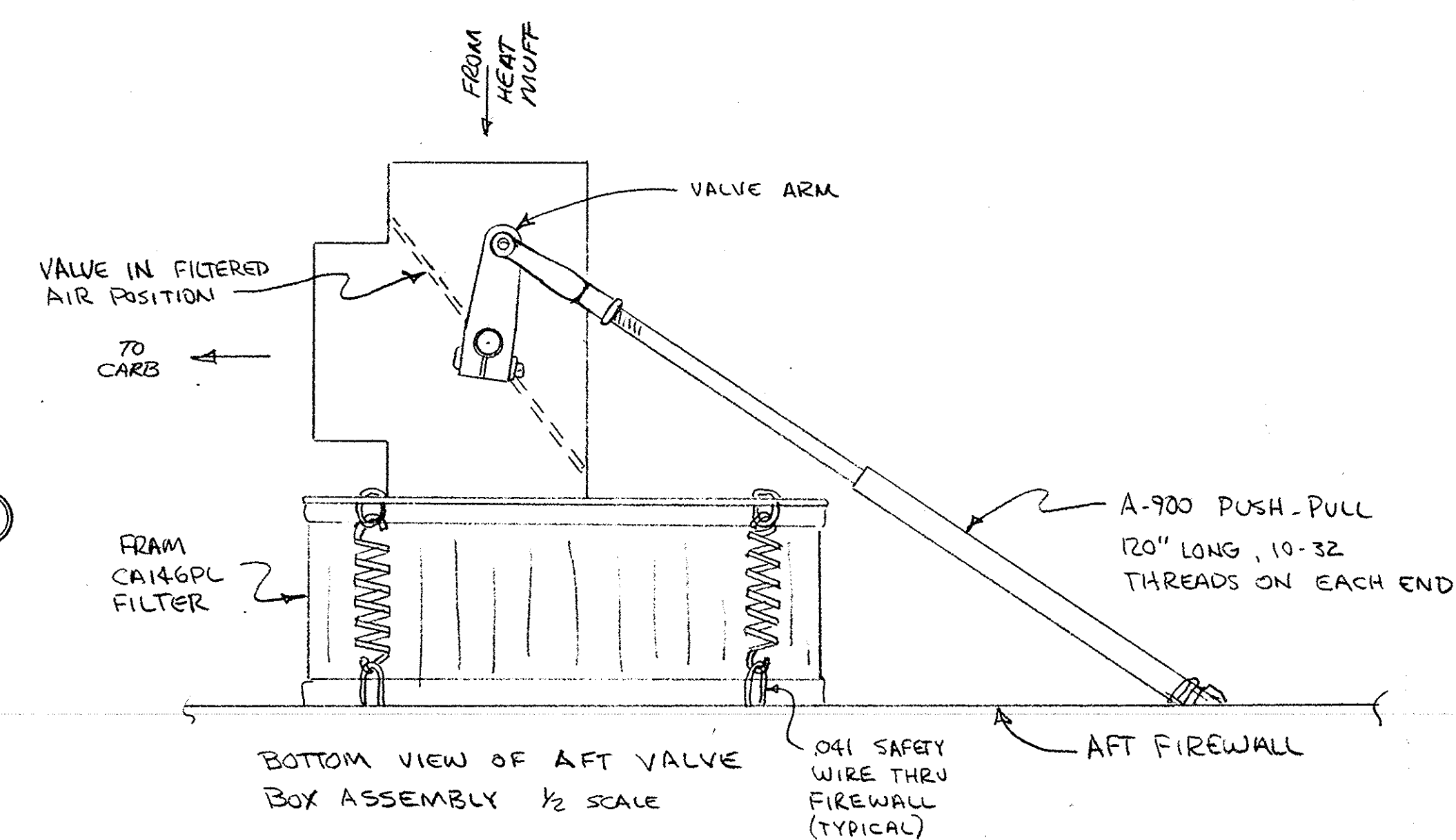
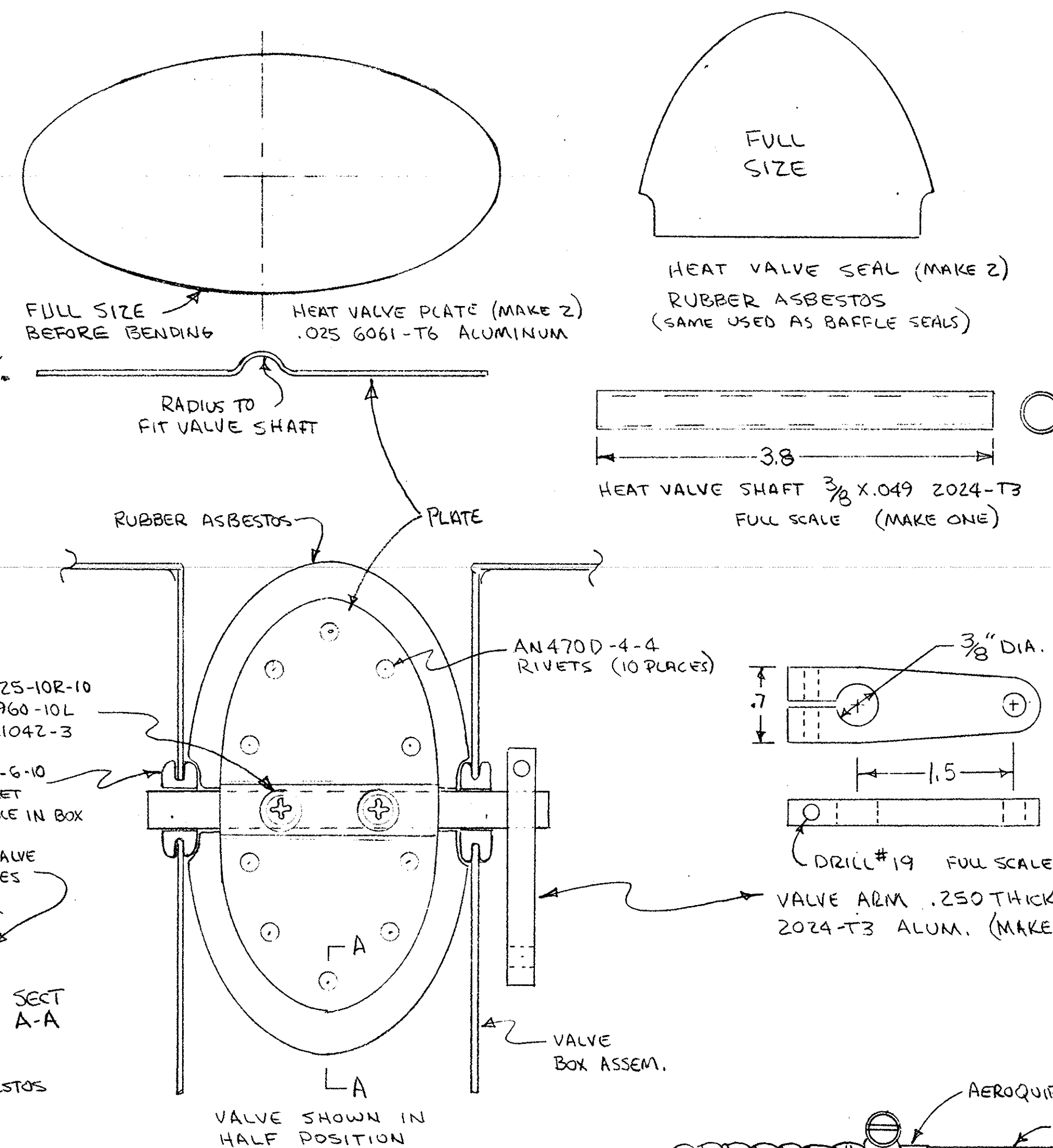
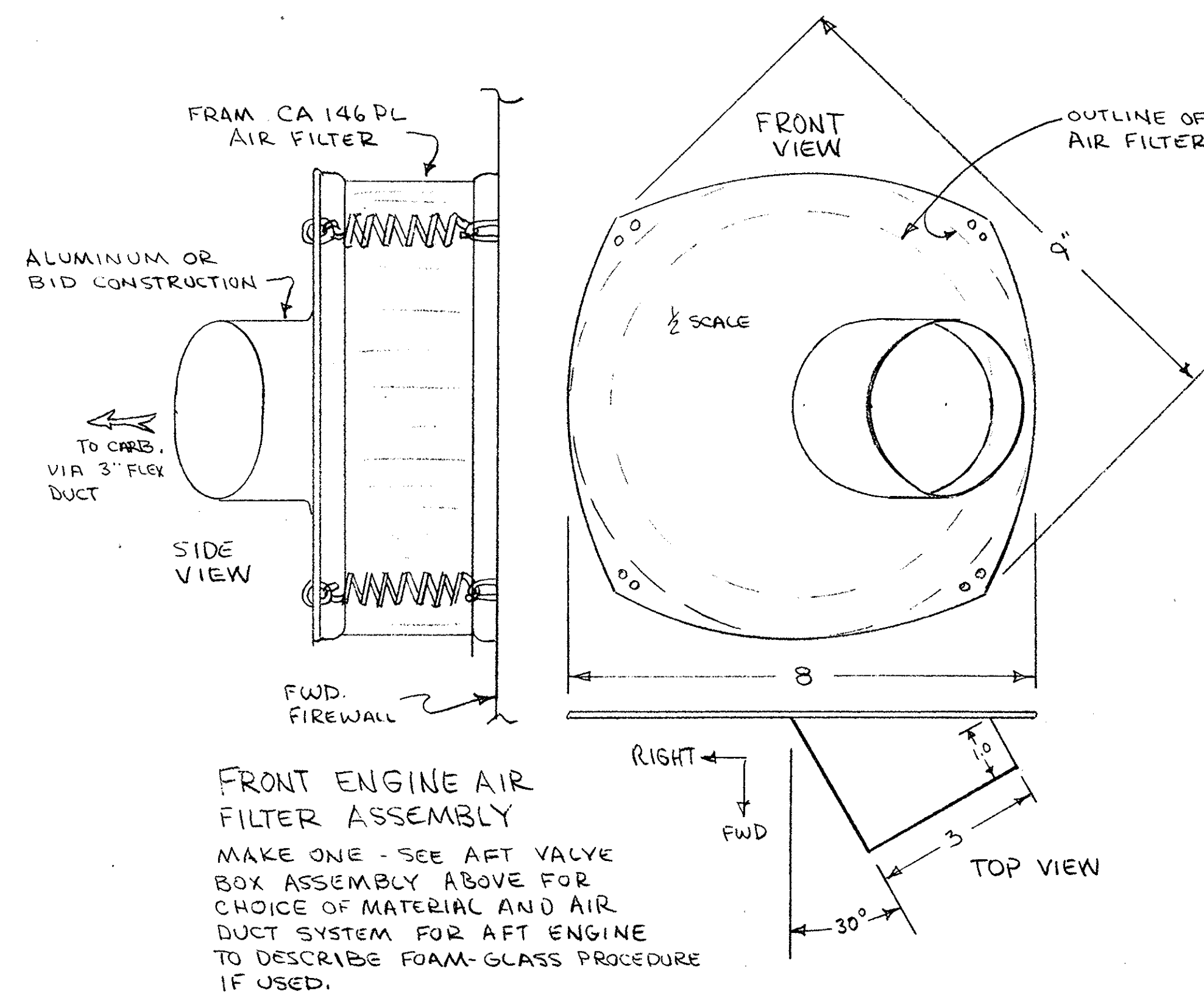
MEASUREMENTS ABC & D ARE DISTANCES FROM REAR FIREWALL TO THE CENTER OF EACH DYNAFOCAL MOUNT HOLE ON THE REAR ENGINE CASE. BECAUSE SEVERAL DIFFERENT DYNAFOCAL RING AND LORD MOUNT COMBINATIONS EXIST IT IS NECESSARY TO OBTAIN A DESIRED COMBINATION AND THEN CONSTRUCT MOUNT USING SELECTED RING AND MEASUREMENTS WHICH POSITION ENGINE AS SHOWN. DEFIANT 39199 USED THE 2 3/4" I.D. RETAINER DYNAFOCAL ENGINE RING WITH APPLICABLE LORD MOUNTS. USE ABOVE CONICAL INFORMATION FOR FIREWALL MOUNTING LOCATIONS & TUBE SIZES. SEE SHEET F1 FOR RING DETAIL AND OTHER INFO.

GENERAL ARRANGEMENT FOR STEEL TUBES
IN A DYNAFOCAL ENGINE MOUNT IS
SIMILAR TO THE CONICAL MOUNT SHOWN.



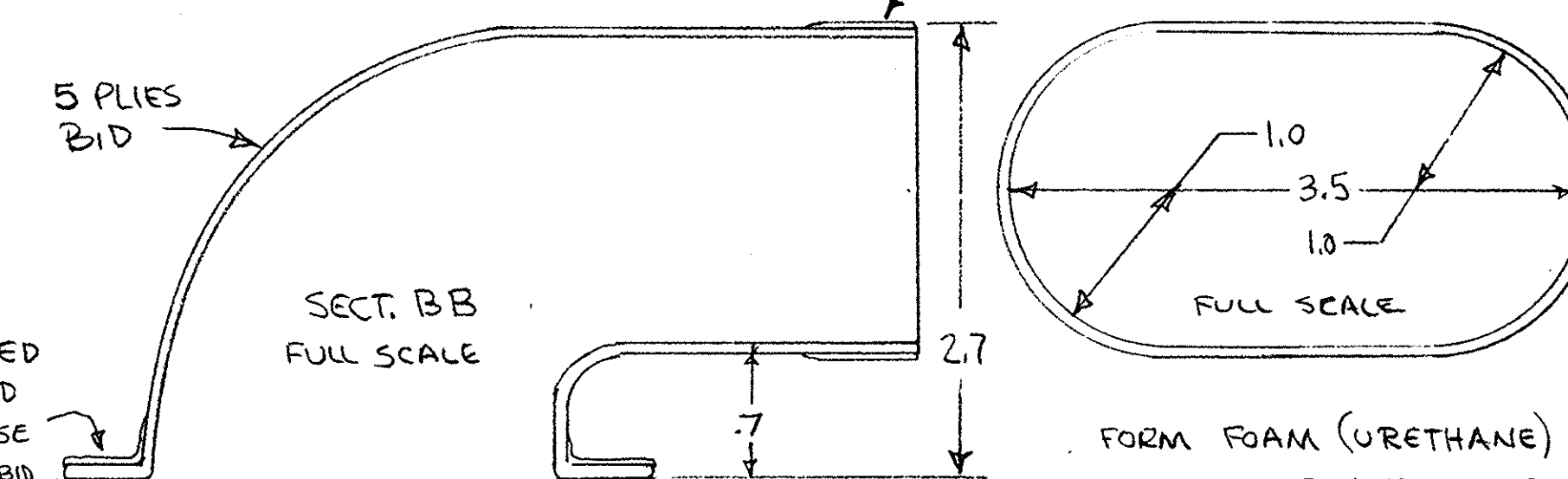


MATERIALS FOR VALVE ASSEMBLY
ARE 3"x.065 WALL 6061-T6 OR T4
TUBING AND .063 6061-T6 ALUM.
SHEET. HELIARC WELD - ALSO
VALVE CAN BE MADE USING
6 PLYS BID WITH ADDITIONAL 3
PLYS REINFORCEMENT AT SAFETY
WIRE ATTACH POINTS AND AROUND
LIP OF BOTH 3" AIR INLET & OUTLETS.
SEE PHOTO _____ SHOWING FORMING
OF GREEN URETHANE INTO VALVE
SHAPE. NOTE FOAM FORM HAS TO BE
MADE UNDER SIZE TO ALLOW FOR
PLY'S OF BID. EXAMPLE: FOAM SIZE
WOULD BE 2.8" (IN O.D. BEFORE LAYUP

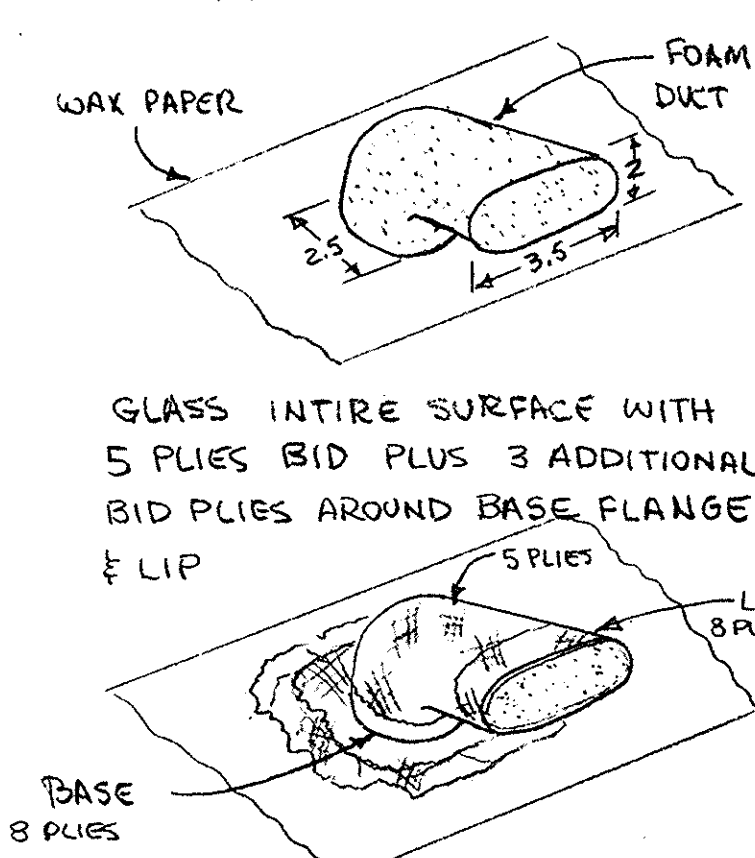


GLASSING NOTE:
WHEN MAKING GLASS DUCTING USE
SMALL SCRAP PIECES OF BID.

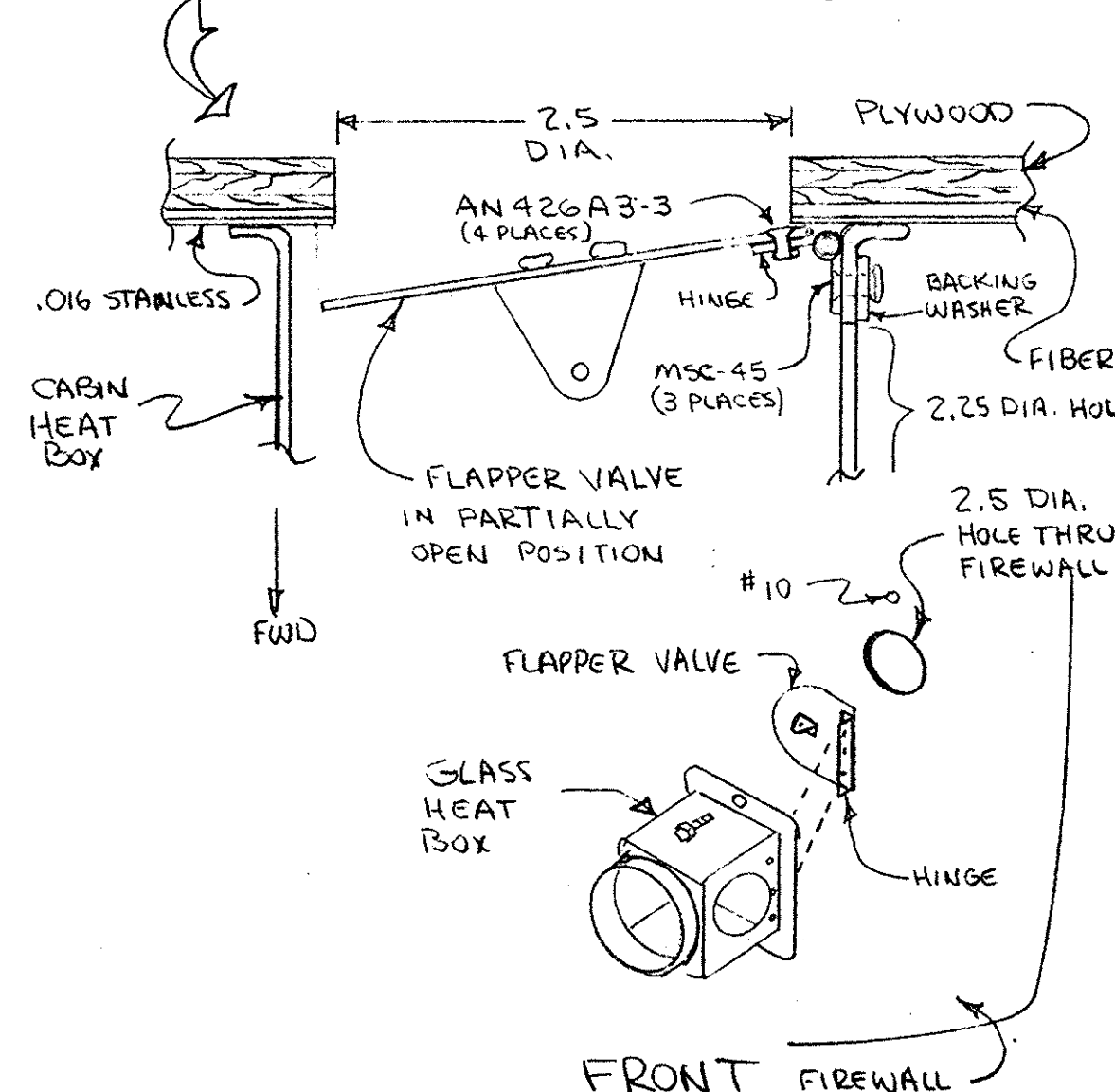
3 ADDED
PLIES BID ON
LIP $\rightarrow$ TOTAL OF 8 PLIES



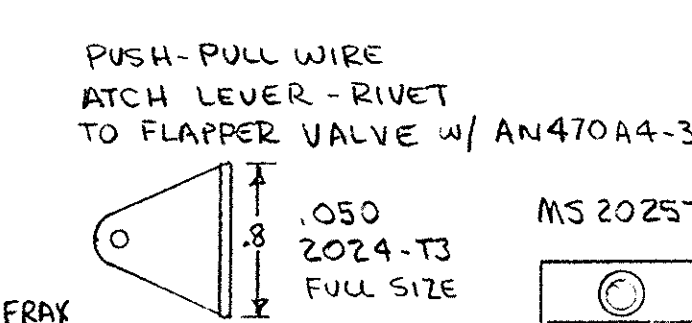
FORM FOAM (URETHANE) TO
SHAPE PER DIMENSIONS SHOWN
& PLACE ON FLAT SURFACE WITH
WAX PAPER BETWEEN.



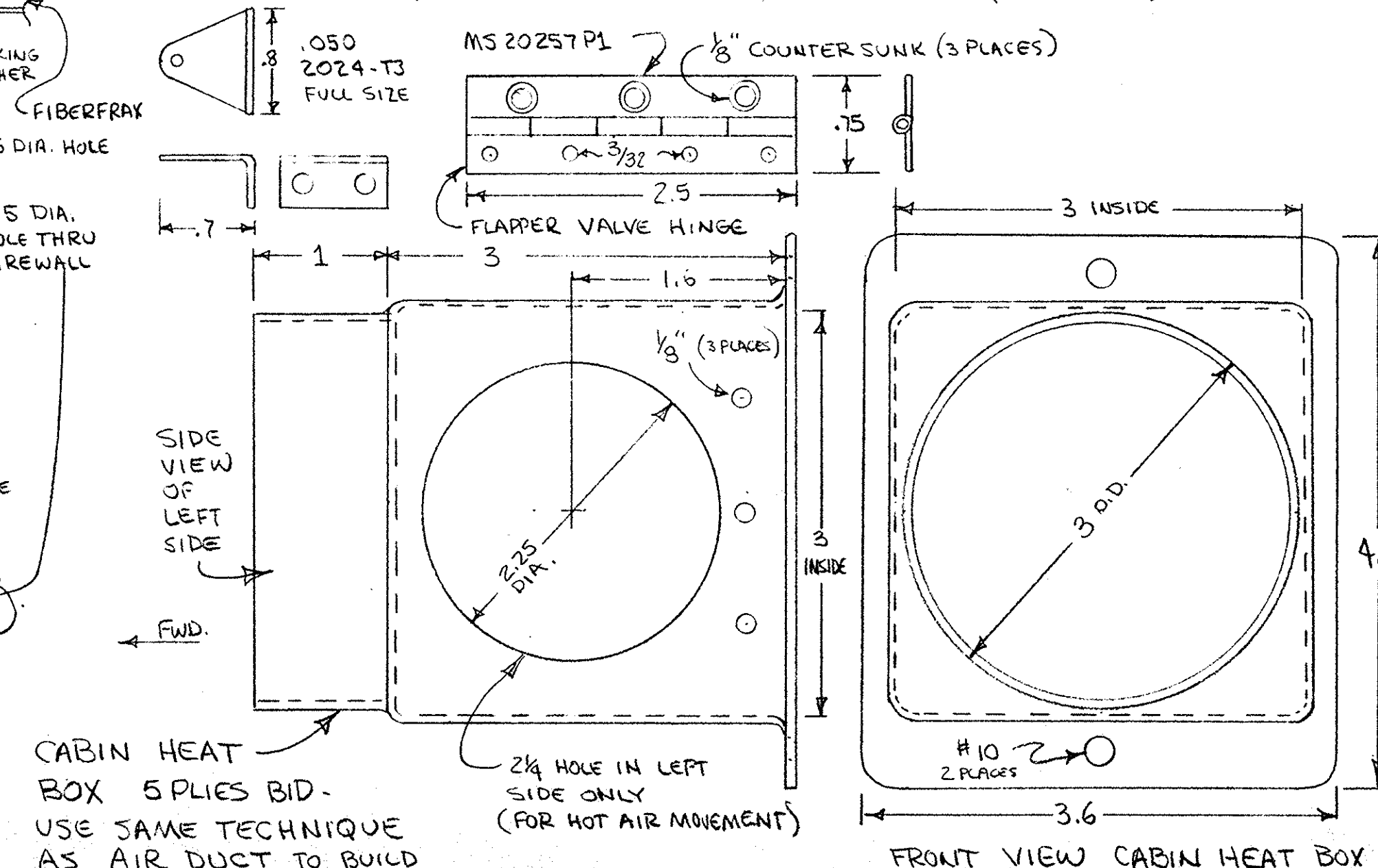
AFTER CURE REMOVE ALL
FOAM & TRIM TO FINAL SHAPE
DRILL MOUNT
HOLES



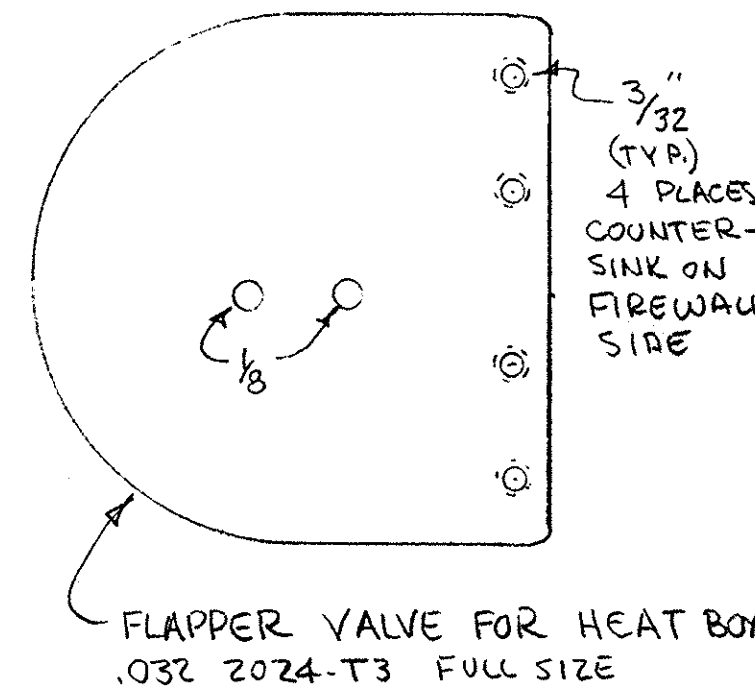
TYPICAL TERMINATION OF AEROQUIP
FLEXIBLE AIR DUCTING SCAT OR CAT
TYPES. (DO NOT SUBSTITUTE CEET OR SCEET
TYPE)



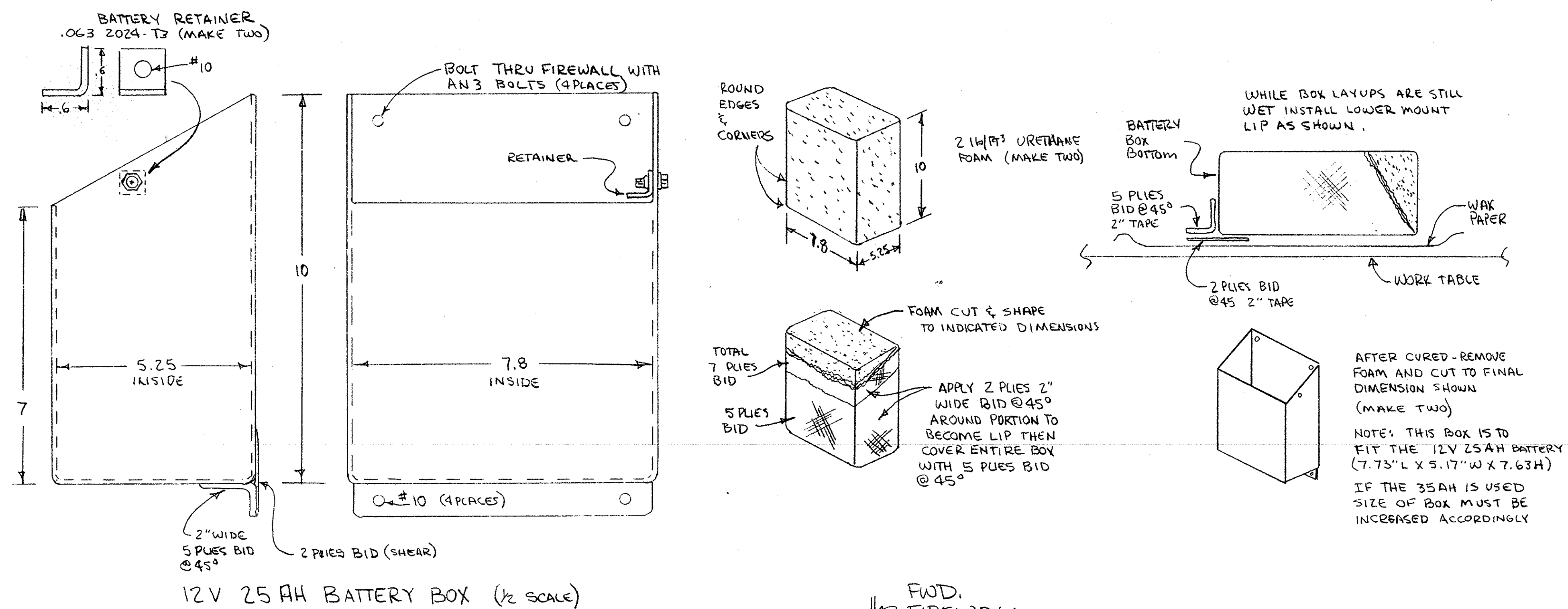
AIR DUCT SYSTEM FOR
AFT ENGINE. (MAKE ONE)



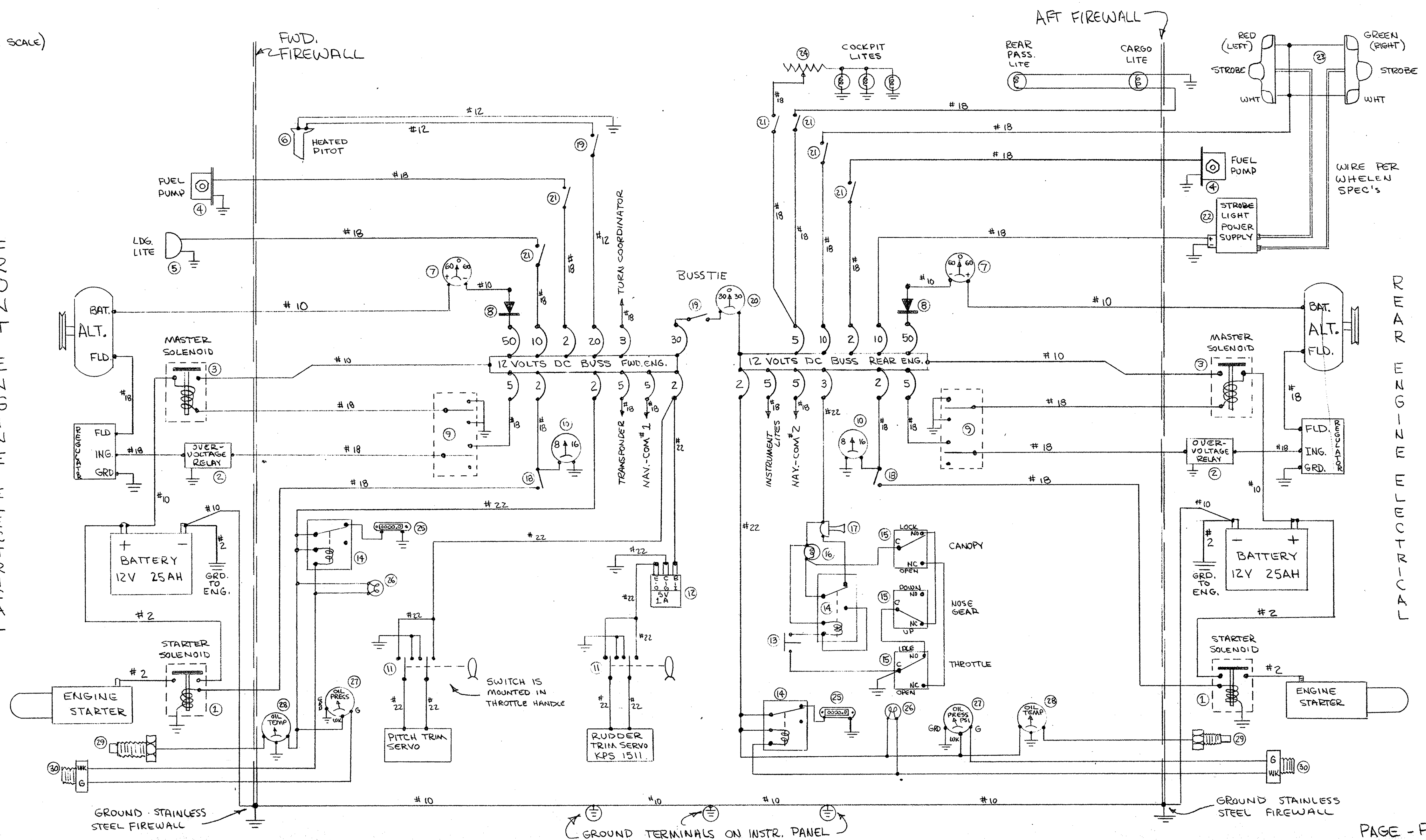
CABIN HEAT —→
BOX 5 PLIES BID.
USE SAME TECHNIQUE
AS AIR DUST TO BUILD

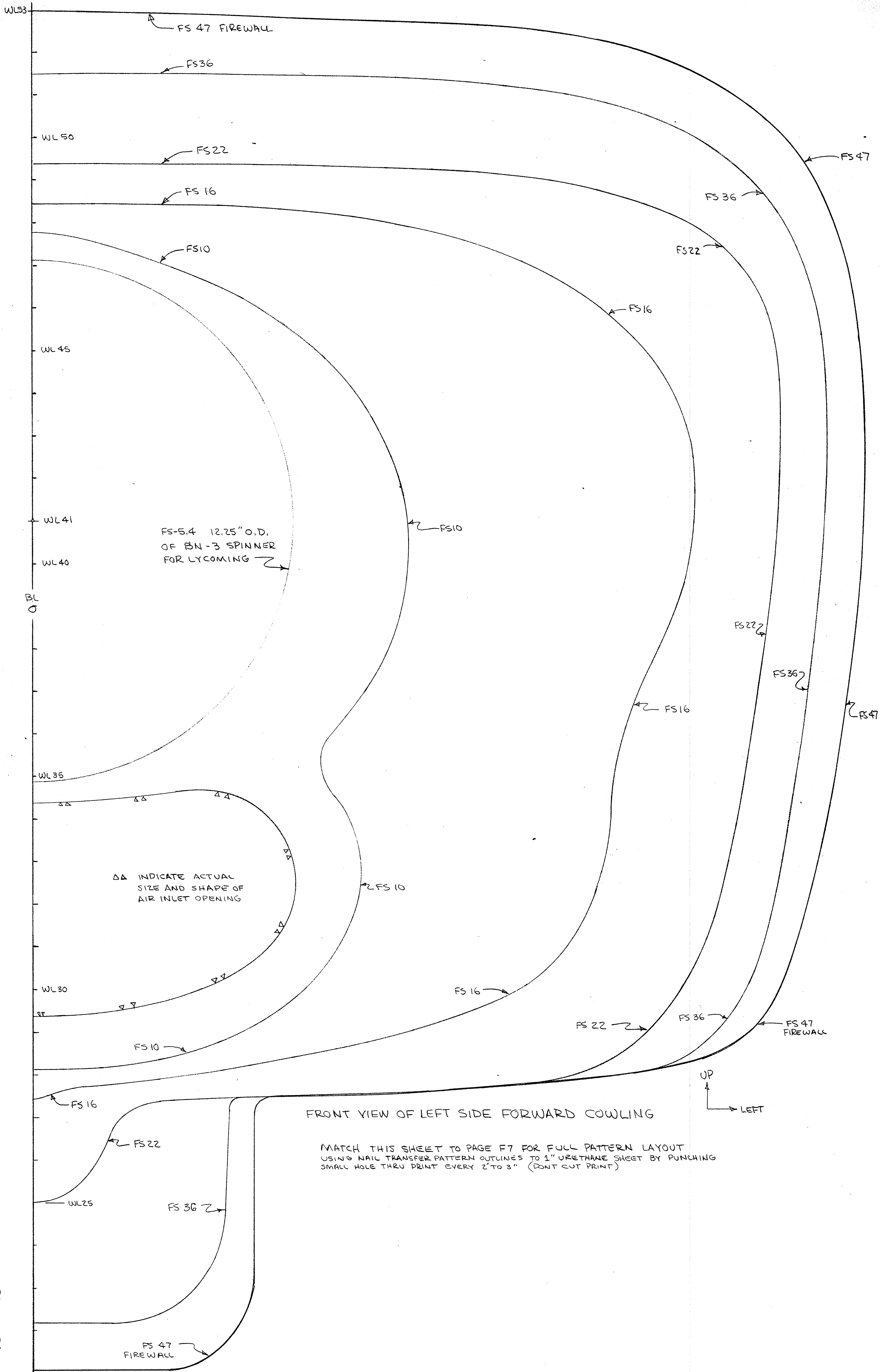


FLAPPER VALVE FOR HEAT BOX
.032 2024-T3 FULL SIZE



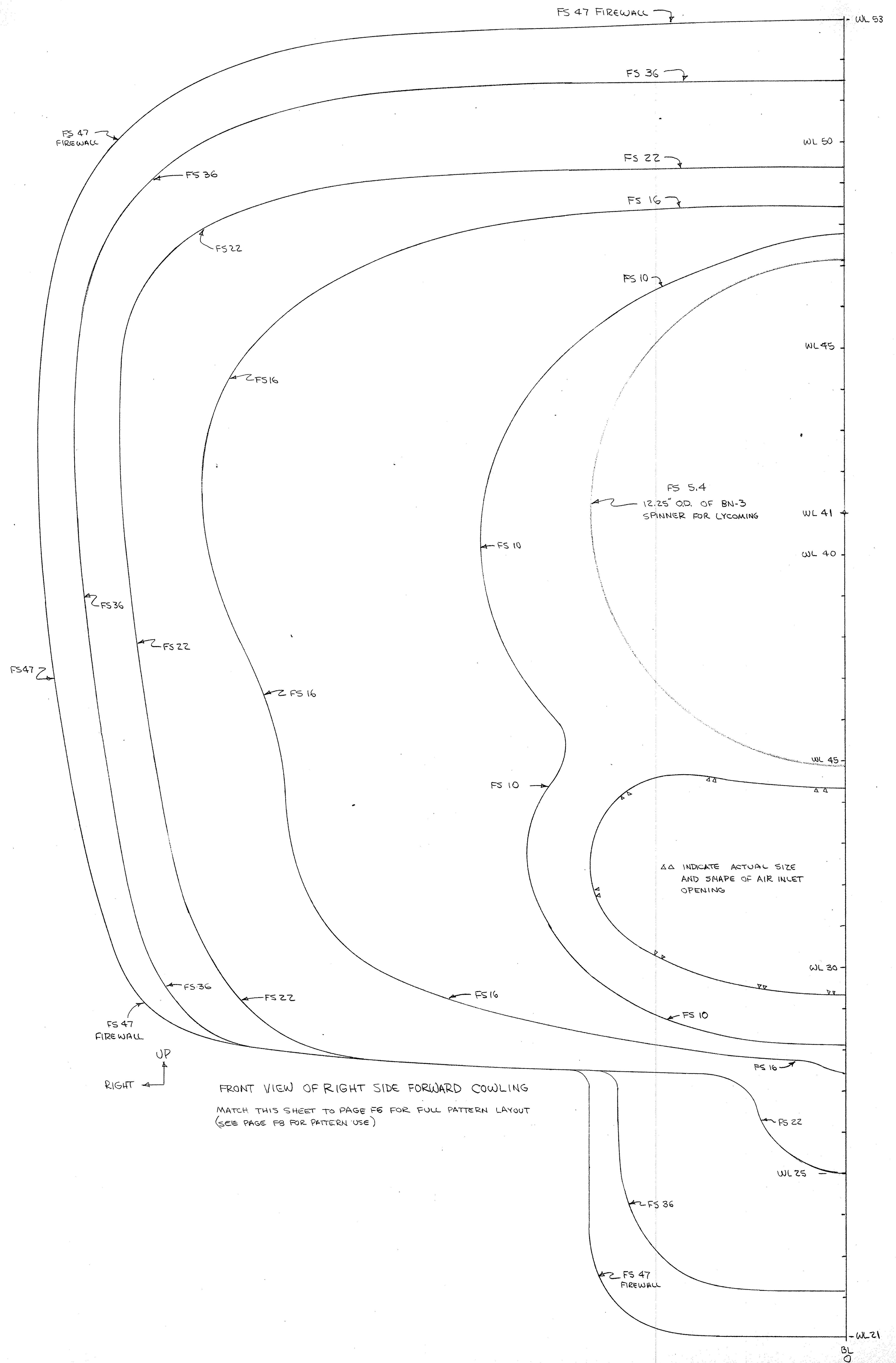
- ① STARTER SOLENOID # 22734
- ② OVERVOLTAGE RELAY # FOC 4002 B PRESTOLITE
- ③ MASTER SOLENOID # 111-140
- ④ FUEL PUMP FACET # 480615 12V NEG GRD
- ⑤ LANDING LIGHT G.E. HALOGEN H4651 HIGH BEAM
- ⑥ HEATED PITOT PIPER # G9041-03
- ⑦ AMMETER 60-0-60 AMPERE RANGE
- ⑧ 60 AMP DIODE
- ⑨ MASTER-ALT. SWITCH MICRO # 8A2021 DPDT
- ⑩ VOLTMETER VDO # 332044
- ⑪ PITCH & RUDDER TRIM SWITCH DPDT MICRO # 8A2041
- ⑫ VOLTAGE REGULATOR RS 7805/309K RADIOSHACK # 278-1770
- ⑬ WARNING DEFEAT PUSH BUTTON FOR HORN RADIO SHACK # 275-1549
- ⑭ RELAY CALECTRO DL-974
- ⑮ MICRO LEVER SWITCH # V3L-3013D3
- ⑯ WARNING LIGHT RADIO SHACK # 272-327 RED
- ⑰ WARNING BUZZER RADIO SHACK # 273-051
- ⑱ STARTER SWITCH AN 3022-6 WITH MS 25224 GUARD.
- ⑲ SWITCH AN 3022-2 (BUSS TIE CLOSED ONLY FOR EMERG.)
- ⑳ AMMETER 30-0-30 AMPERE RANGE
- ㉑ SWITCH MICRO 8A1011
- ㉒ WHEEL STROBE POWER SUPPLY # A413, HDA, DF
- ㉓ TWO A600-PG & PR-14 STROBES WITH HD-60 KIT
- ㉔ DIMMING RHEOSTAT 3.5 AMP. @ 12V OHMITE # 0141
- ㉕ HOUR METER STEWART WARNER # 15000
- ㉖ LOW OIL PRESS. LITE RADIO SHACK # 272-327 RED
- ㉗ OIL PRESSURE GAUGE VDO # 350-044
- ㉘ OIL TEMPERATURE GAUGE VDO # 310-014
- ㉙ OIL TEMP. SENDER VDO # 323-057 & 240-023
- ㉚ OIL PRESS. SENDER VDO # 360-004 & 240-023

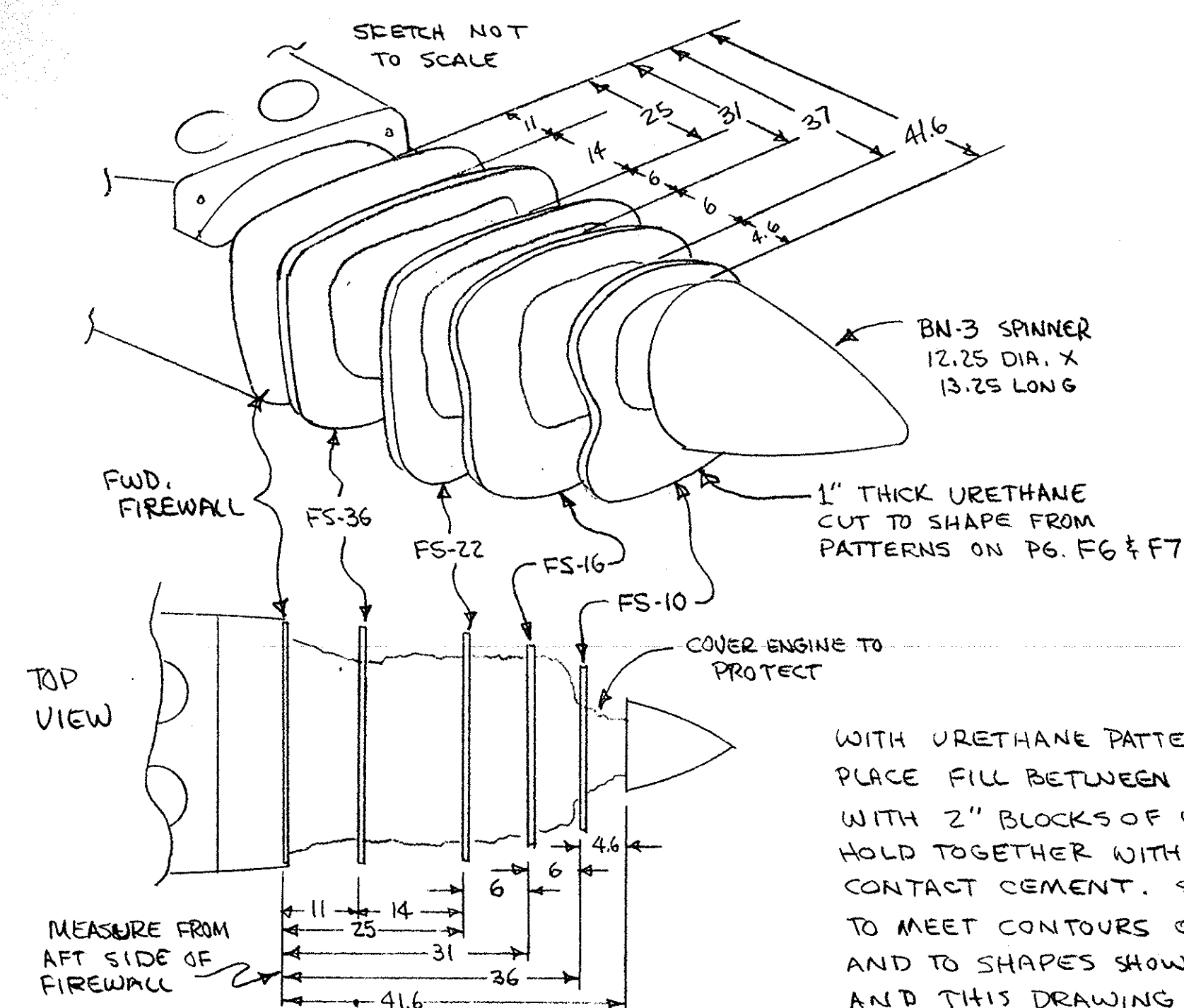




FRONT VIEW OF LEFT SIDE FORWARD COWLING

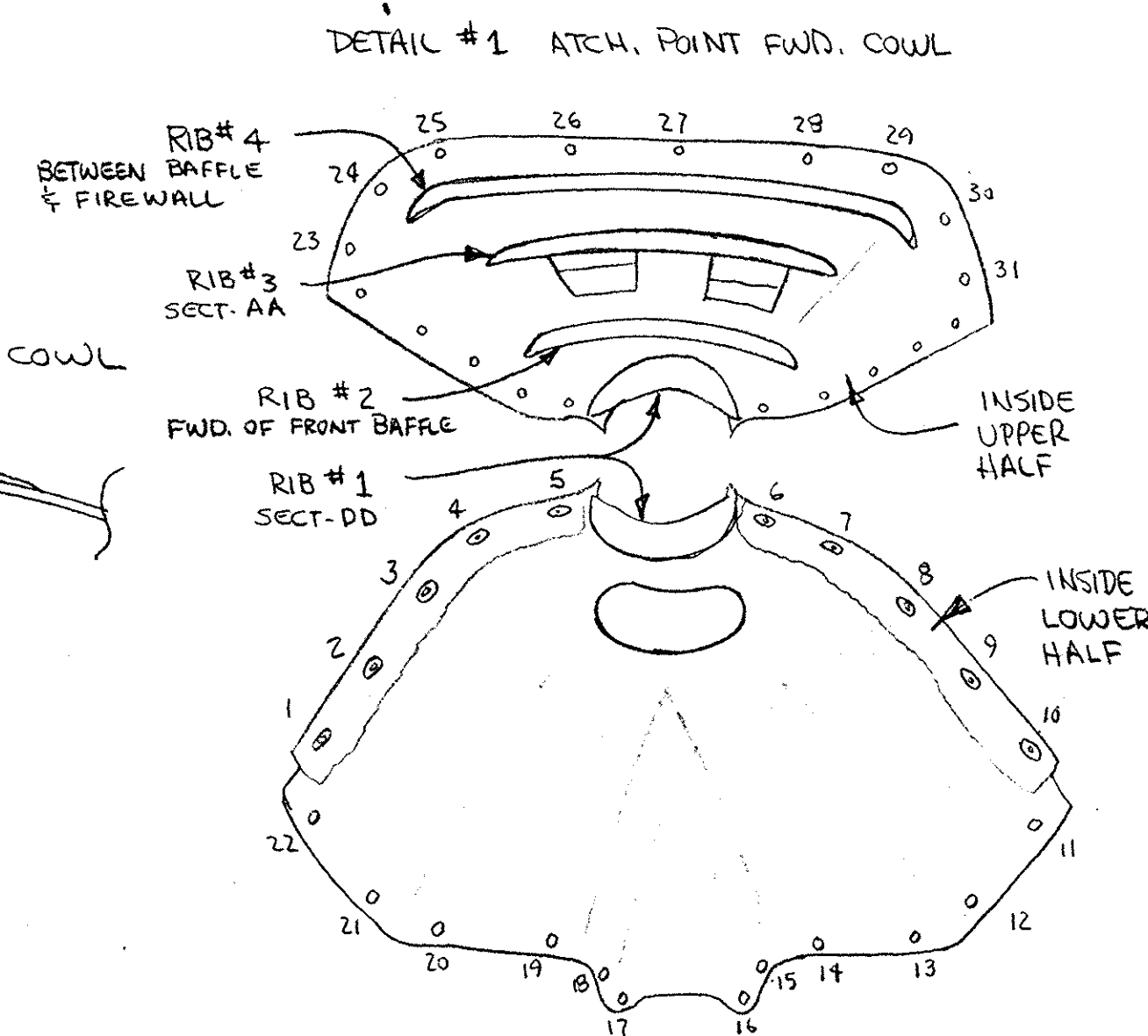
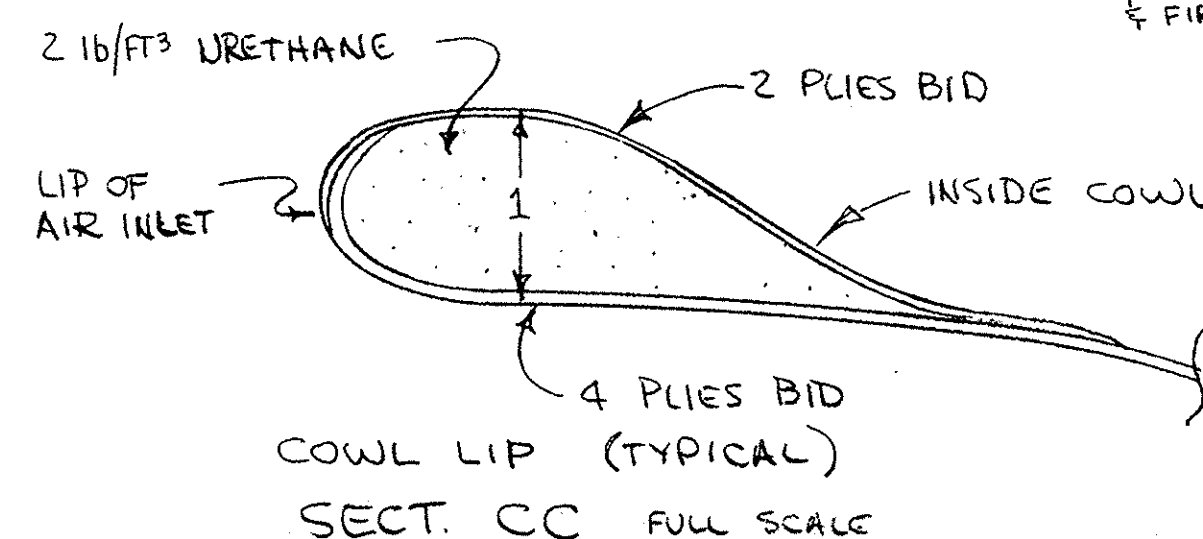
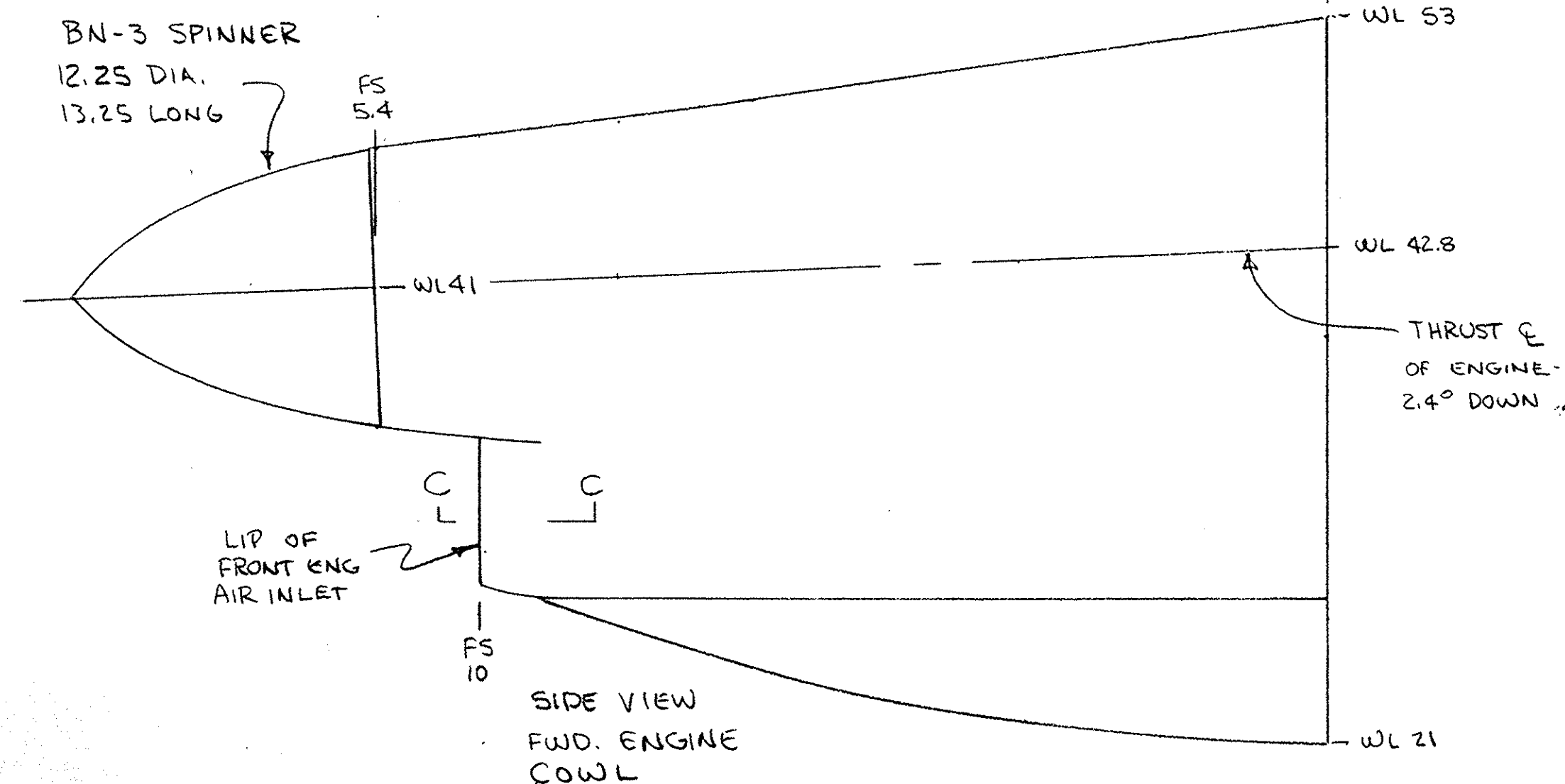
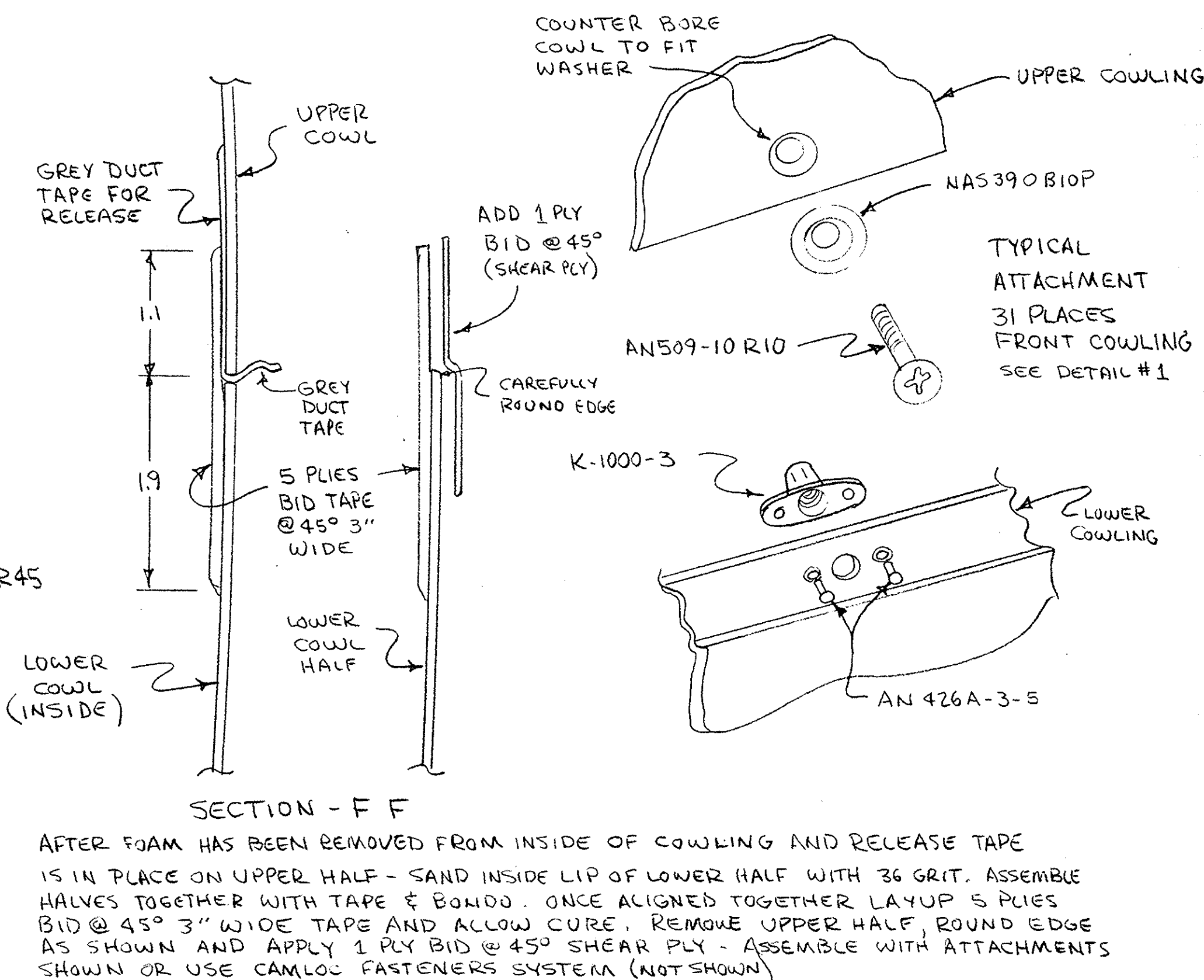
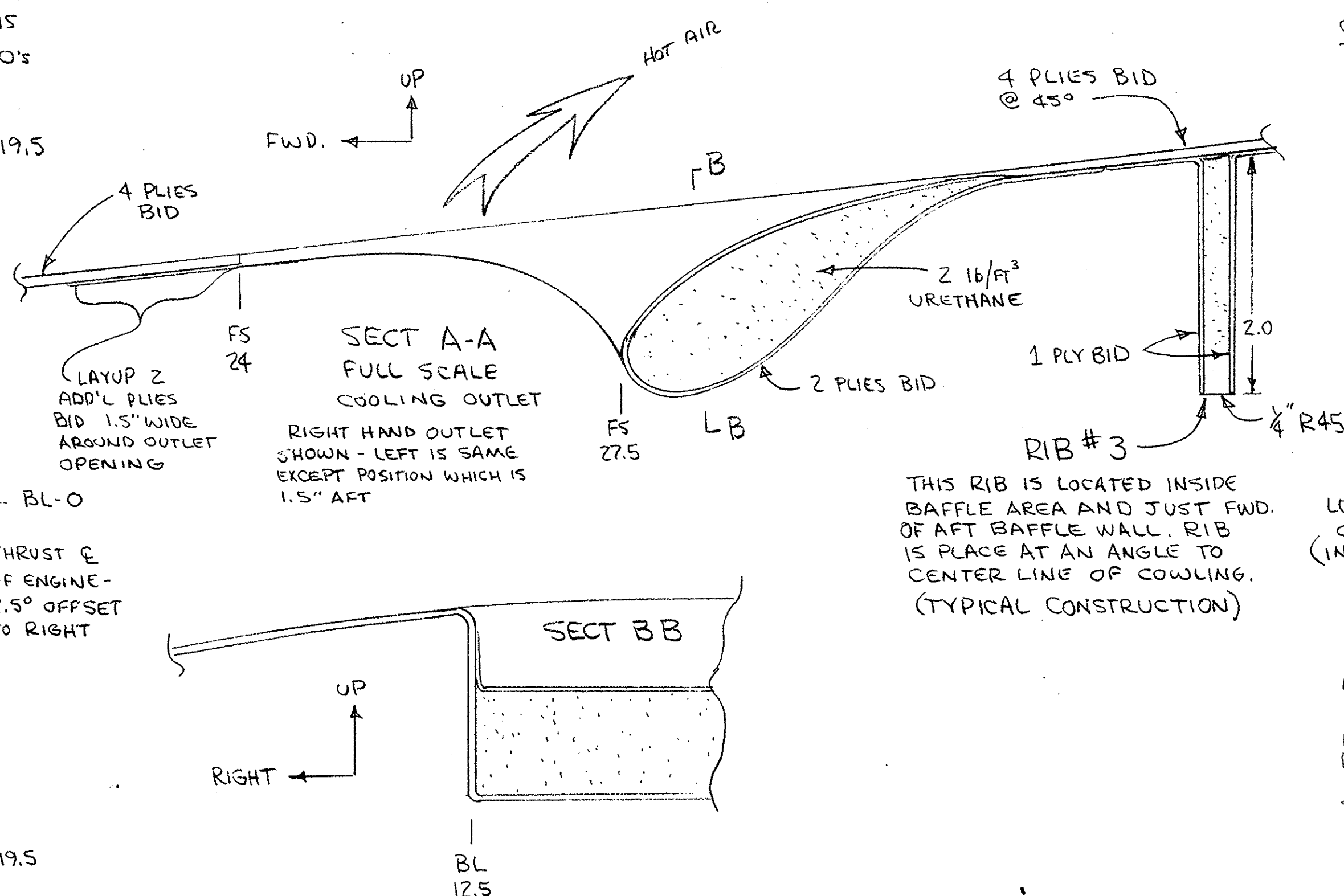
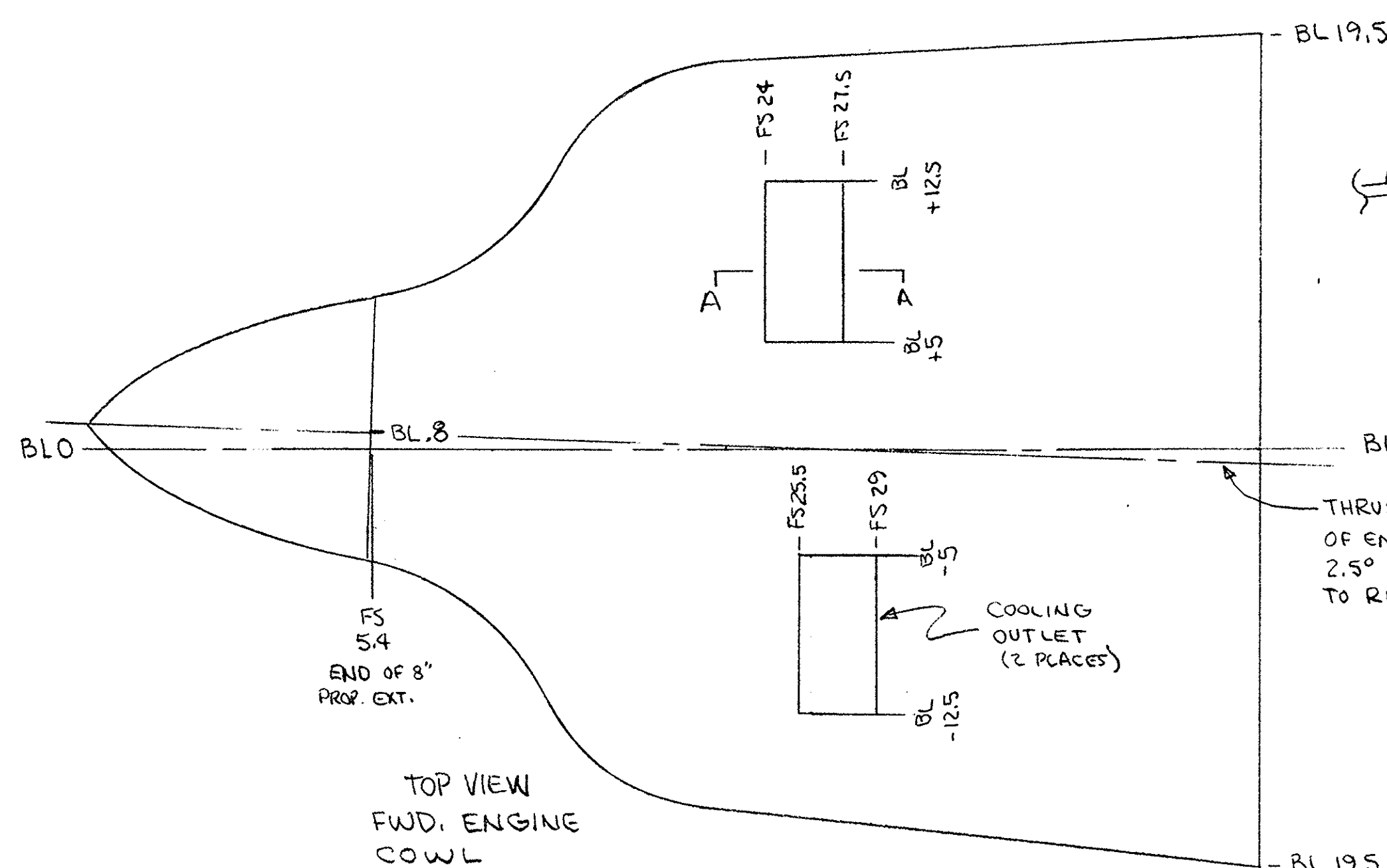
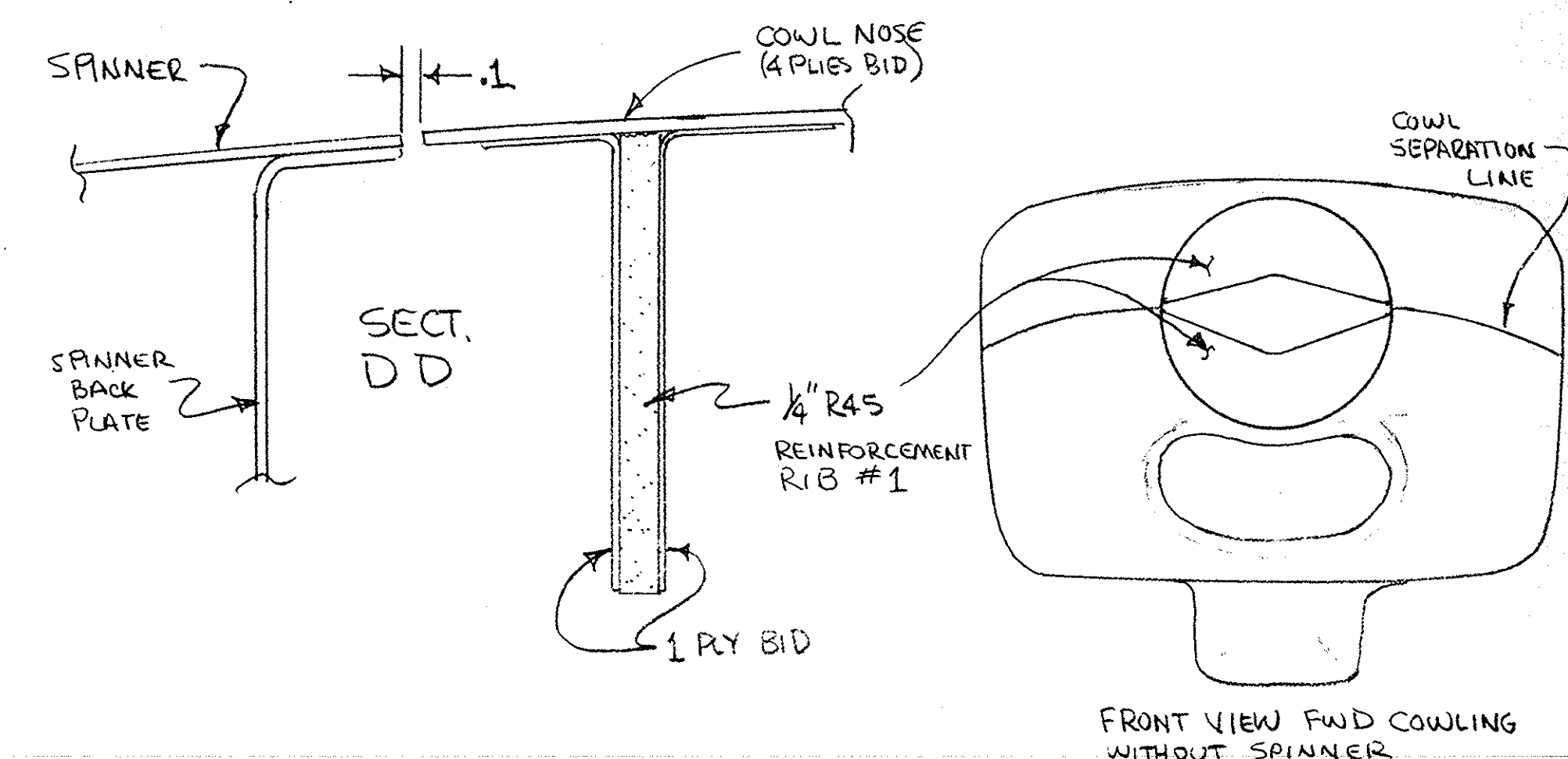
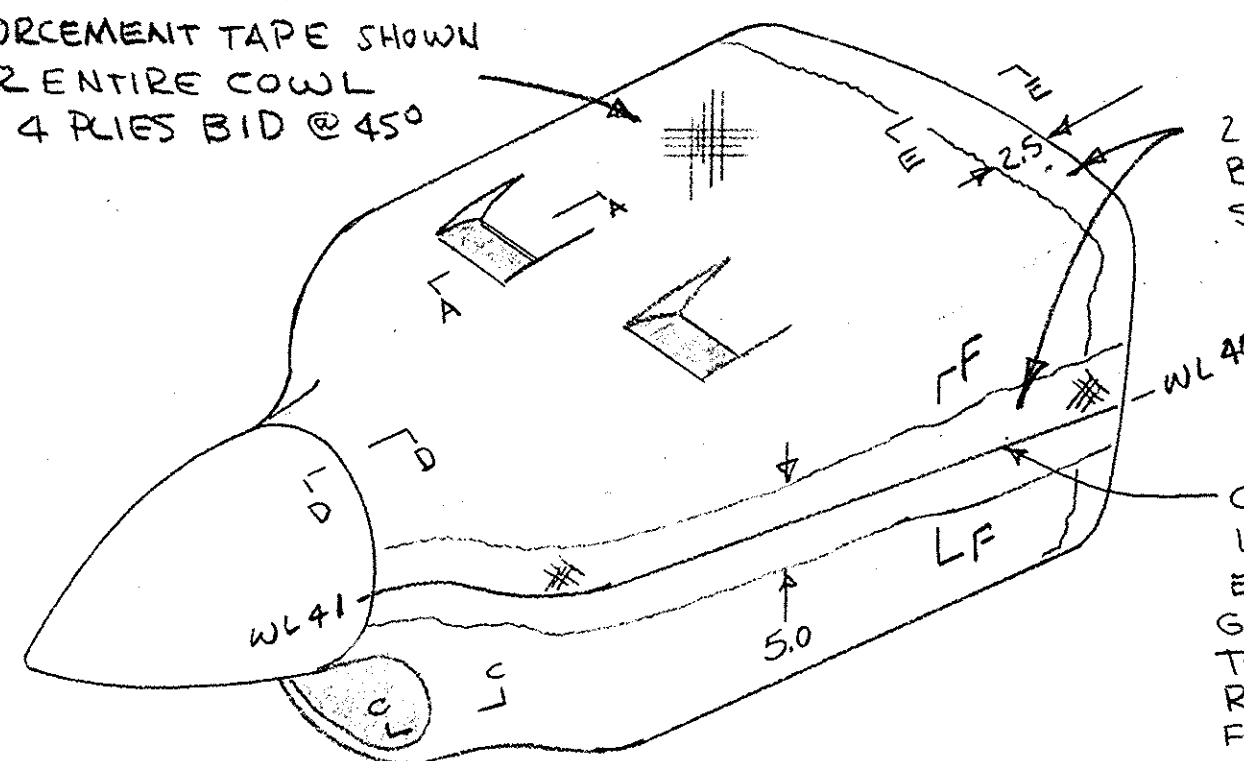
MATCH THIS SHEET TO PAGE F7 FOR FULL PATTERN LAYOUT
 USING NAIL TRANSFER PATTERN OUTLINES TO 1" URETHANE SHEET BY PUNCHING
 SMALL HOLE THRU PRINT EVERY 2" TO 3" (DON'T CUT PRINT)

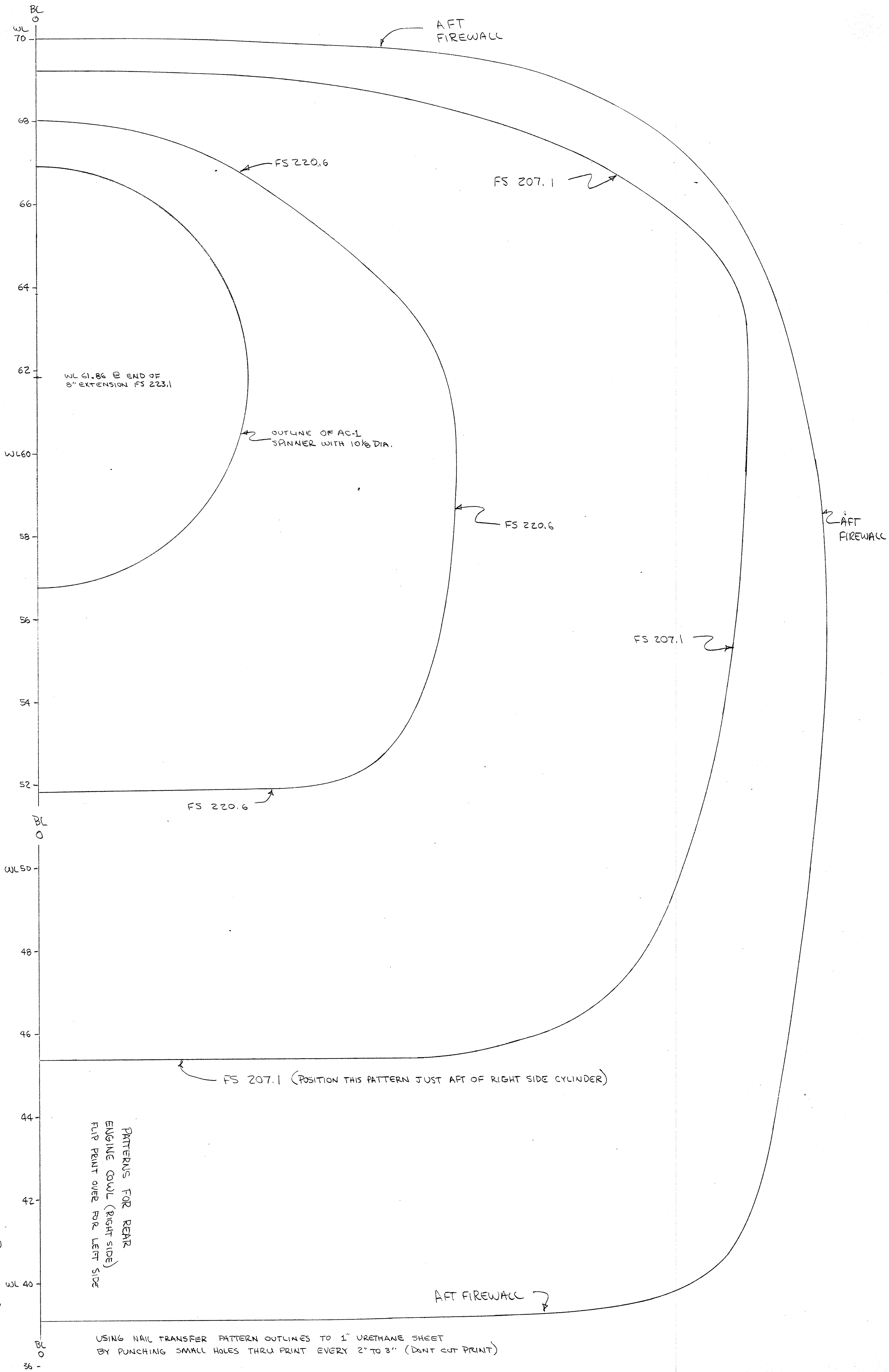


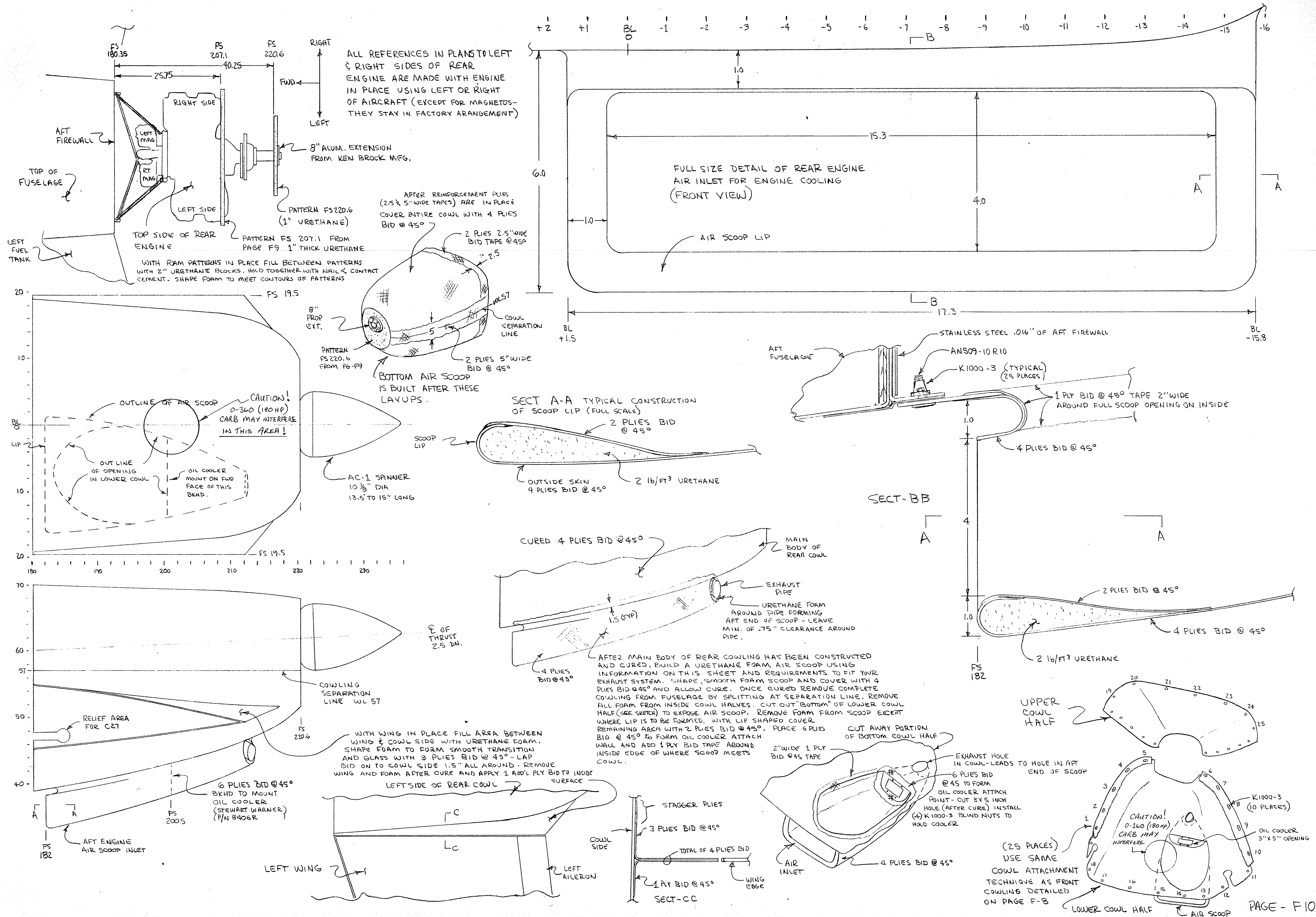


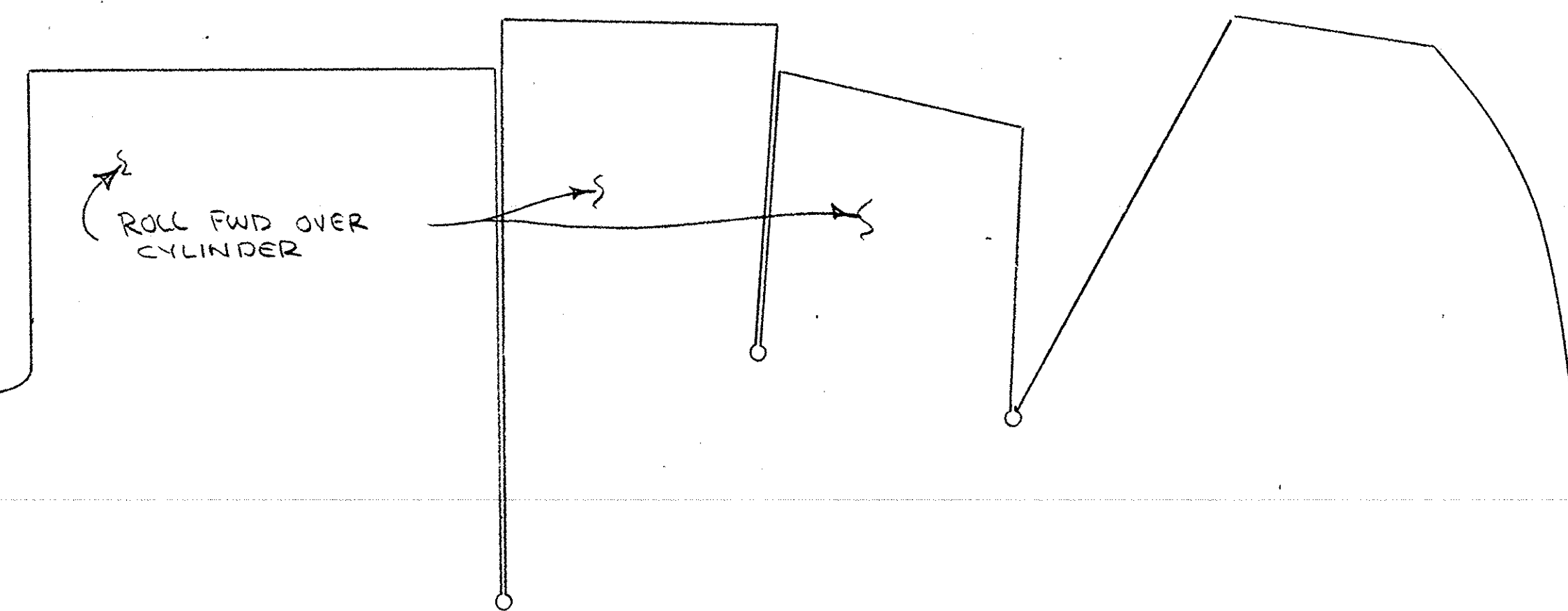
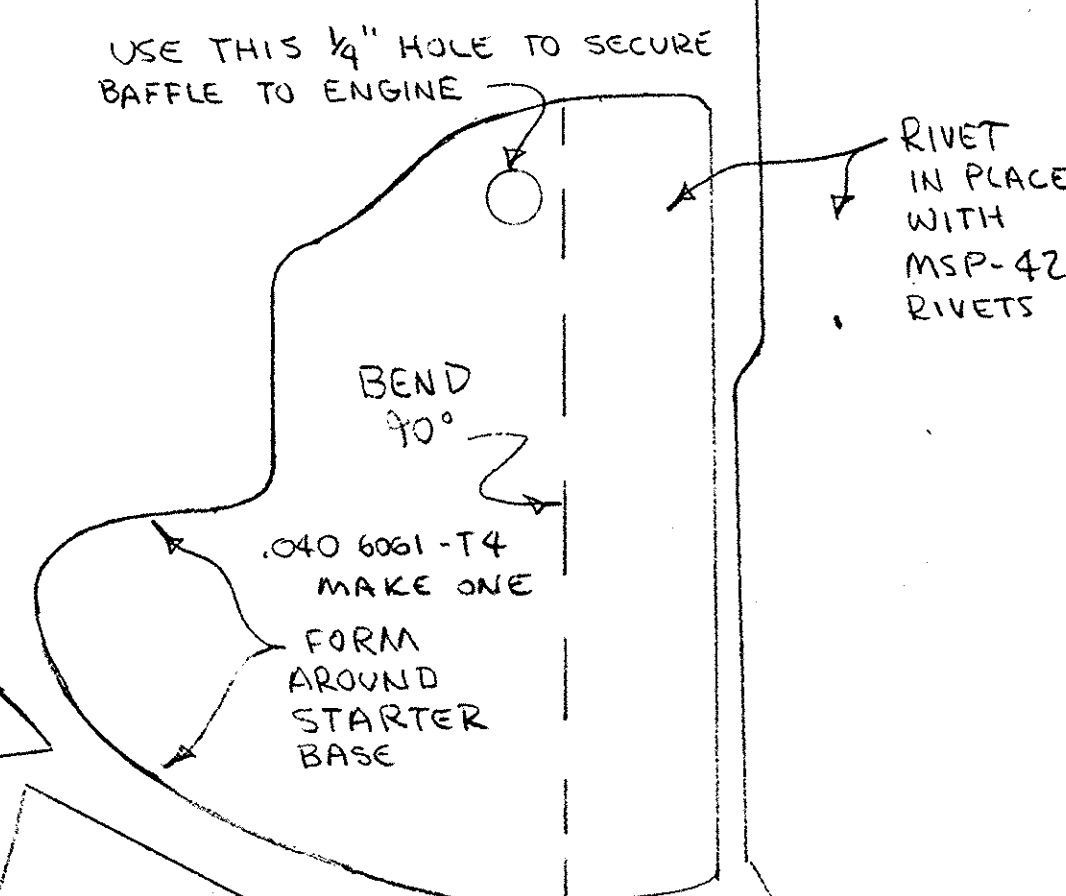
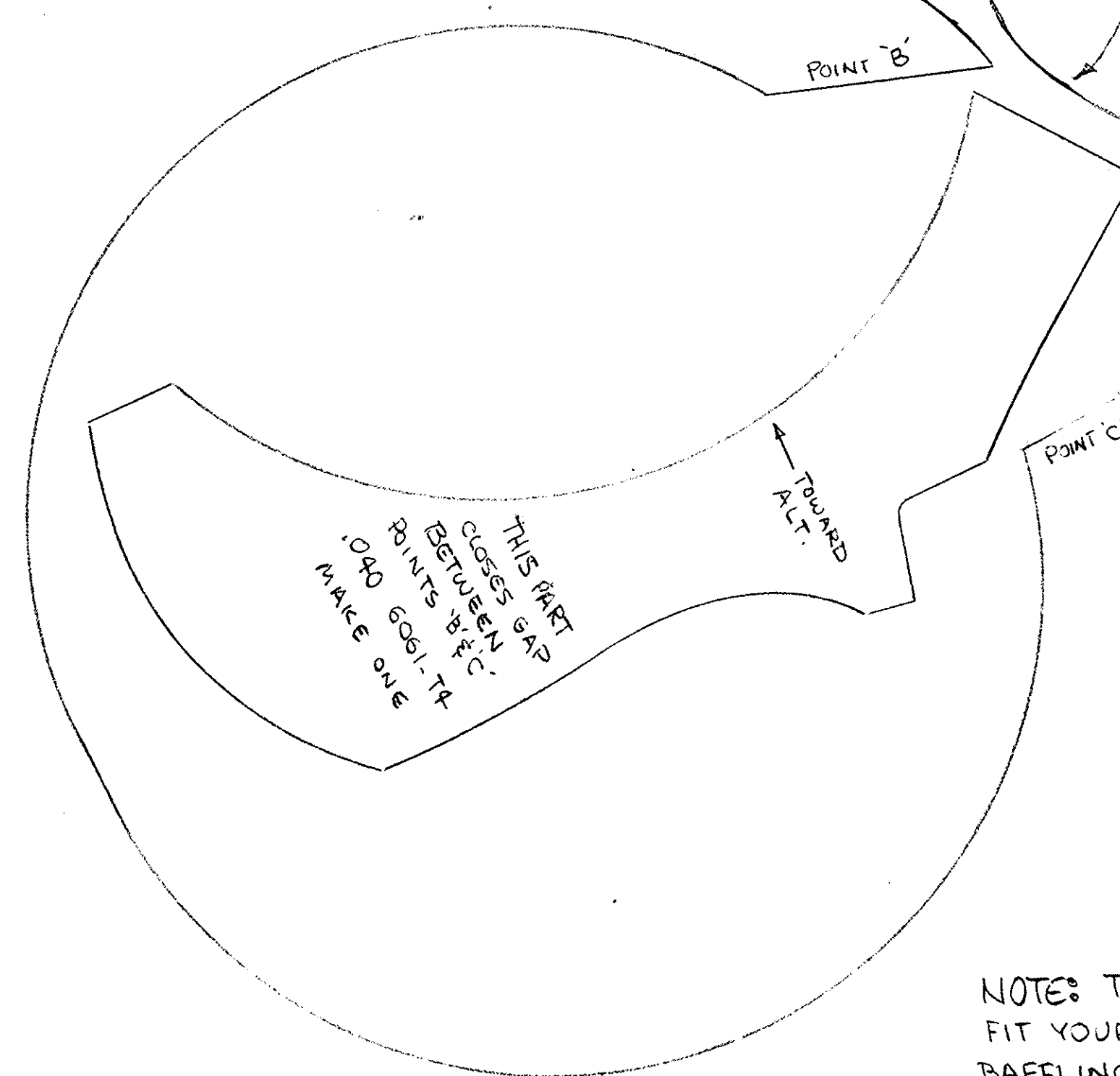
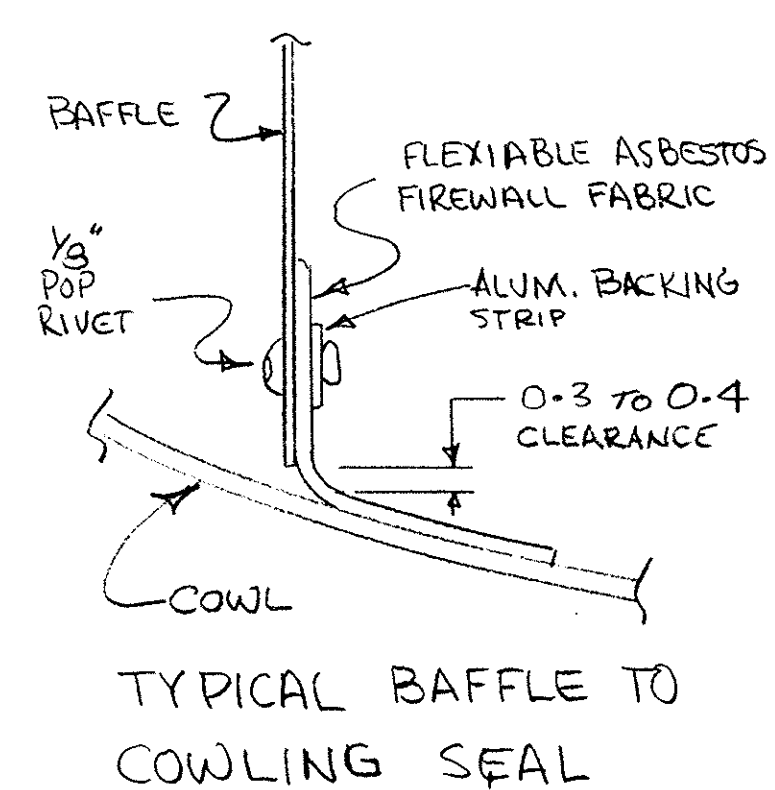
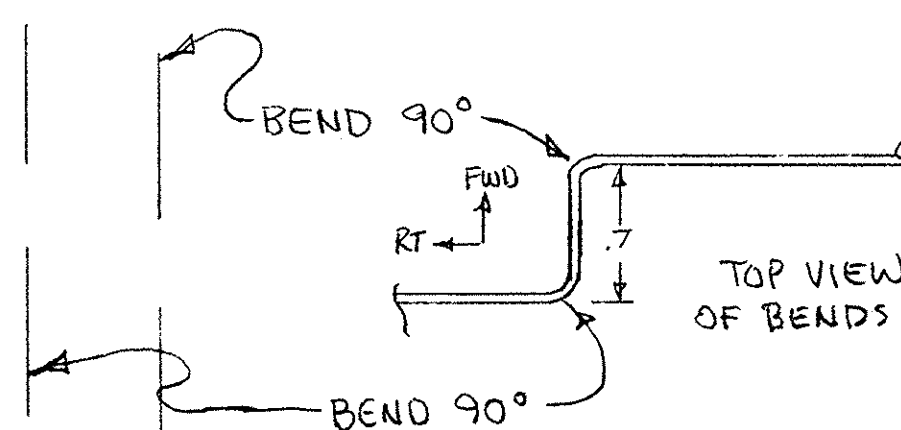
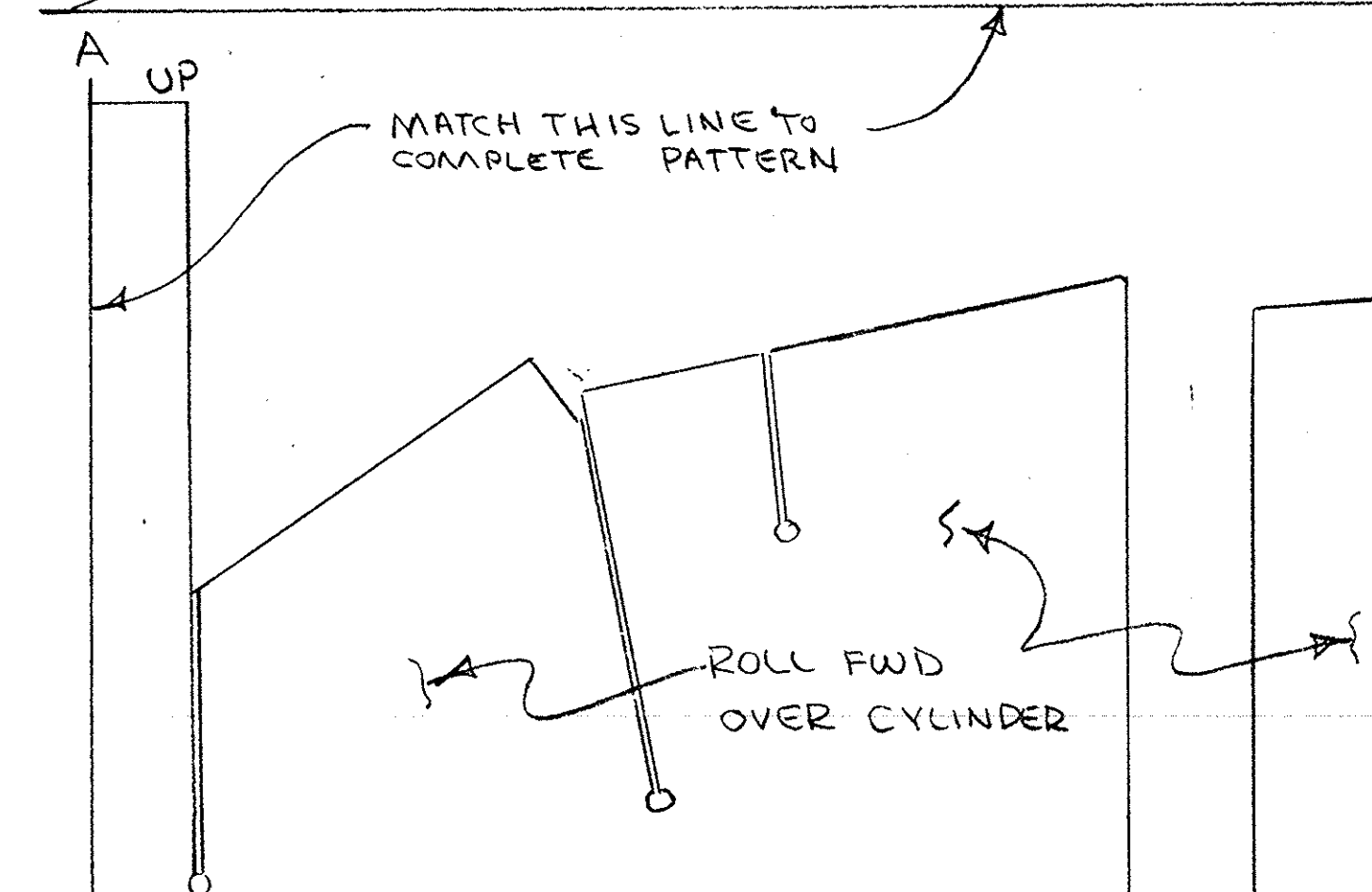
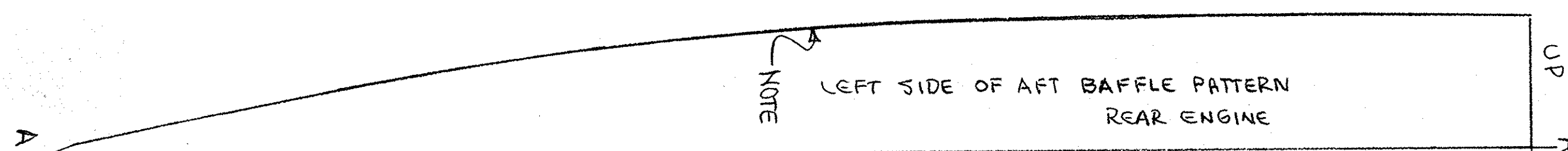
WITH URETHANE PATTERNS IN
PLACE FILL BETWEEN PATTERNS
WITH 2" BLOCKS OF URETHANE.
HOLD TOGETHER WITH NAILS AND
CONTACT CEMENT. SHAPE FOAM
TO MEET CONTOURS OF PATTERNS
AND TO SHAPES SHOWN IN PHOTO'S
AND THIS DRAWING

AFTER PLACING 2 PLYS
REINFORCEMENT TAPE SHOWN
COVER ENTIRE COWL
WITH 4 PLYS BID @ 45°



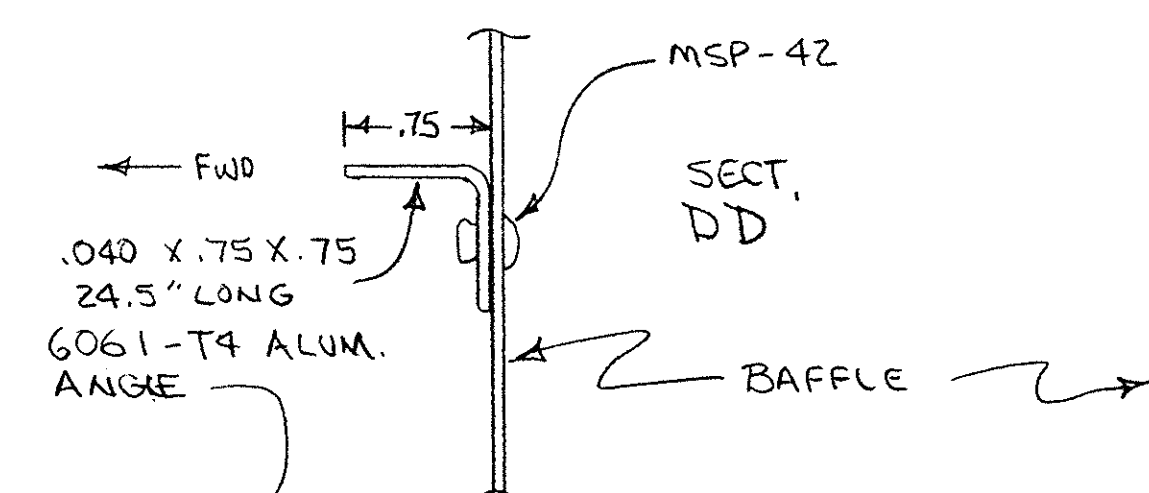




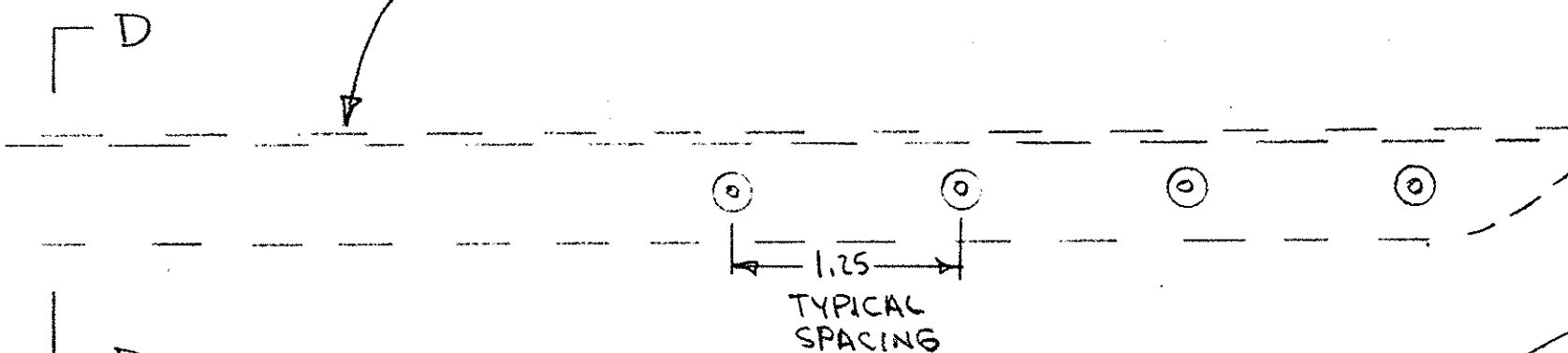


AFT FACE OF REAR
BAFFLE ON REAR ENGINE
.040 6061-T4 (MAKE ONE)

TRANSFER THIS PATTERN TO MANILA PAPER, HOLD IN
PLACE ON ENGINE, TRIM AND ADJUST AS REQUIRED
FOR YOUR ENGINE, THEN PROCEED TO CUT FINAL
ALUM. (.040 6061-T4) BAFFLE USING CORRECTED PATTERN.



NOTE: TRIM OUTER EDGE TO
FIT YOUR COWLING AFTER ALL
BAFFLING IS IN PLACE



NOTE: 2

① RIGHT SIDE - FWD. PIECE
REAR ENGINE MAKE ONE
MATES WITH PART ③
.040 6061-T4

BEND
90°

BEND
90°

BEND 90°

② LEFT SIDE - AFT PIECE
REAR ENGINE .040 6061-T4
MATES WITH PART ① MAKE ONE

BEND
90°

1/4" HOLE
TYPICAL

BEND 90°

BEND 90°

THIS OUTLINE
(AREA TOWARD COWLING)
WILL HAVE TO BE TRIMMED
TO FIT YOUR COWL

AFT FACE OF RIGHT
FRONT BAFFLE ON REAR
ENGINE. MAKE ONE
.040 6061-T4 ALUM.

TRANSFER THE PATTERNS ON THIS PAGE TO
MANILA PAPER, HOLD IN PLACE ON ENGINE,
TRIM AND ADJUST AS REQUIRED FOR YOUR
ENGINE, THEN PROCEED TO CUT FINAL ALUM.
(.040 6061-T4) BAFFLE USING CORRECTED PATTERN.

FINAL TRIM OUTER EDGES TO FIT YOUR COWLING
AFTER ALL BAFFLING IS IN PLACE ON ENGINE

NOTE: THIS OUTLINE (AREA TOWARD COWLING)
WILL HAVE TO BE TRIMMED TO FIT
YOUR COWL

AFT FACE OF LEFT
FRONT BAFFLE REAR
ENGINE MAKE ONE
.040 6061-T4 ALUM.

ROLL THIS PORTION
AROUND CYLINDER

ROLL THIS
PORTION OVER
CYLINDER

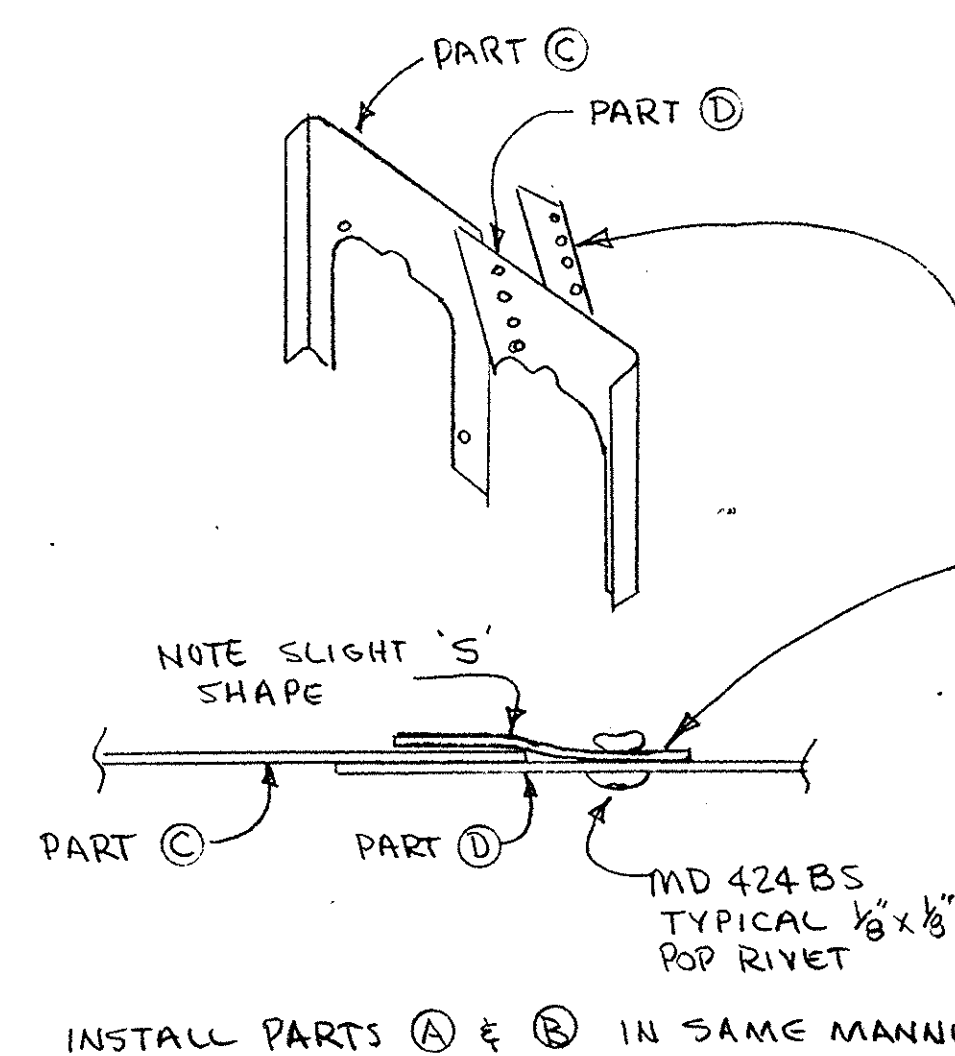
BEND
90°

NOTE: ALL EDGES WHICH NEAR
COWLING WILL REQUIRE TRIMMING
TO FIT YOUR INSTALLATION OF
ENGINE AND COWLING.

③ LEFT SIDE - FWD PIECE
REAR ENGINE MAKE ONE
MATES WITH PART ②
.040 6061-T4

BEND
90°

④ RIGHT SIDE - AFT PIECE
REAR ENGINE
MATES WITH PART ①
.040 6061-T4 MAKE ONE



BAFFLE
RETAINER
FOR CYLINDER
EXPANSION
.040 6061-T4
MAKE TWO
"FORM INTO
'S' SHAPE"

FORWARD FACE OF RIGHT
REAR BAFFLE - FRONT
ENGINE (MAKE ONE)
.040 6061-T4 ALUM.

BEND 90°
AFT

ROLL THIS PORTION
OVER CYLINDER

BEND AND FORM TO CONTOURS
OF CYLINDERS

BAFFLE BETWEEN CYLINDERS
FRONT & REAR ENGINES
(MAKE FOUR)
.040 6061-T4

ROLL THIS PORTION
OVER CYLINDER

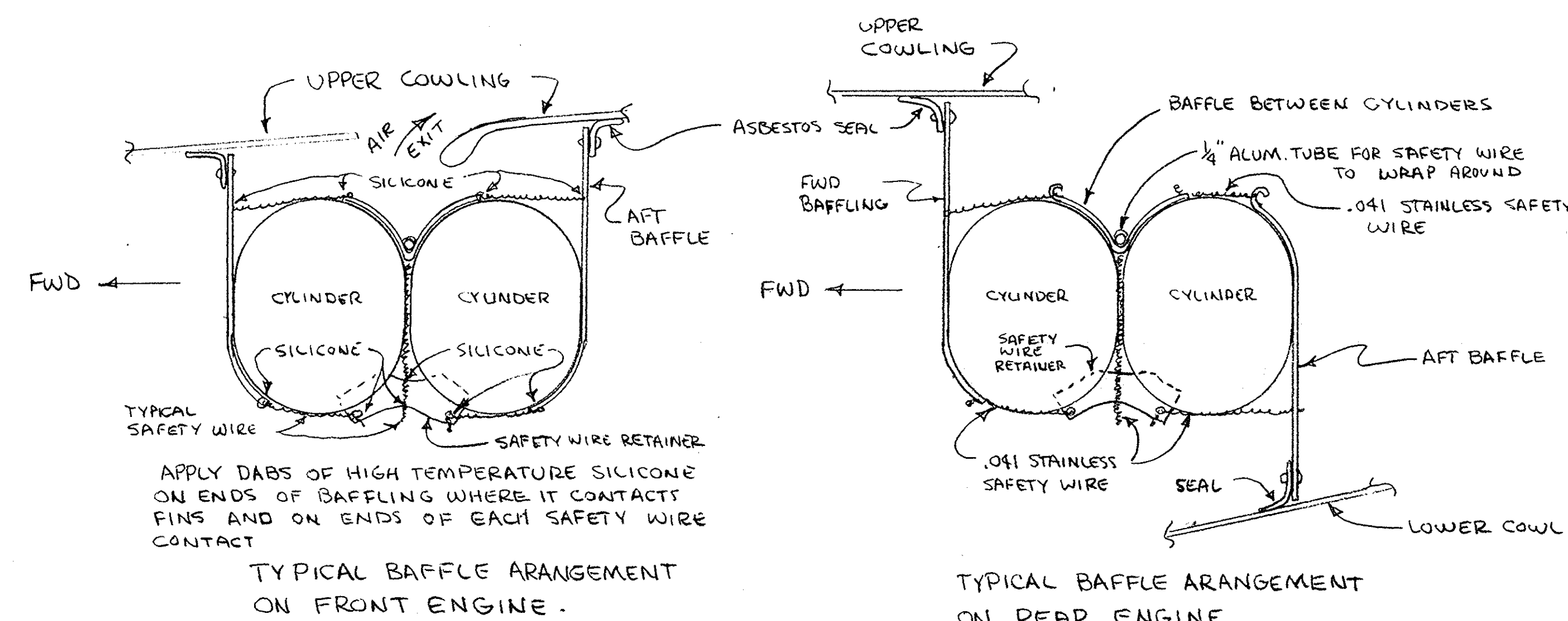
FORWARD FACE OF LEFT
REAR BAFFLE - FRONT
ENGINE (MAKE ONE)
.040 6061-T4 ALUM.

BEND 90°
AFT

BEND 90°
INBD
FWD
BEND 90°
TOP VIEW OF BENDS (TYPICAL)

1/250 DIA
TYPICAL

SAFETY WIRE RETAINER (MAKE FOUR)
.063 2024-T3 ALUM.



⑤ LEFT SIDE AFT PIECE
FRONT ENGINE (MAKE ONE)
MATES WITH PART ④
.040 6061-T4 ALUM.

TRANSFER THE PATTERNS ON THIS PAGE TO
MANILA PAPER, HOLD IN PLACE ON ENGINE,
TRIM AND ADJUST AS REQUIRED FOR YOUR
ENGINE, THEN PROCEED TO CUT FINAL ALUM.
(.040 6061-T4) BAFFLE USING CORRECTED
PATTERN. FINAL TRIM OUTER EDGES
TO FIT YOUR COWLING AFTER ALL BAFFLING
IS IN PLACE ON ENGINE.

FORWARD FACE OF
LEFT FRONT BAFFLE
ON FRONT ENGINE
.040 6061-T4 (MAKE ONE)

⑥ RIGHT SIDE FWD PIECE
FRONT ENGINE (MAKE ONE)
.040 6061-T4 ALUM.
MATES WITH PART ④

BAFFLE RETAINER FOR CYLINDER
EXPANSION (MAKE TWO)
FORM INTO SLIGHT 'S' SHAPE
(SEE SKETCH ON PAGE F 12)
.040 6061-T4

⑤ LEFT SIDE FWD. PIECE
FRONT ENGINE (MAKE ONE)
.040 6061-T4 ALUM.
MATES WITH PART ④ PAGE F-13

④ RIGHT SIDE AFT PIECE
FRONT ENGINE (MAKE ONE)
.040 6061-T4 ALUM.
MATES WITH PART ⑥

TRANSFER THE PATTERNS ON THIS PAGE
TO MANILA PAPER, HOLD IN PLACE ON
ENGINE, TRIM AND ADJUST AS REQ'D.
FOR YOUR ENGINE, THEN PROCEED TO
CUT FINAL ALUM. BAFFLE USING
CORRECTED PATTERN. FINAL TRIM
OUTER EDGES TO FIT YOUR COWLING
AFTER ALL BAFFLING IS IN PLACE ON
ENGINE.

FORWARD FACE OF RIGHT
FRONT BAFFLE ON FRONT
ENGINE (MAKE ONE)
.040 6061-T4 ALUM.

STIFFNER FOR
RIGHT FRONT BAFFLE
ON FRONT ENGINE
.040 6061-T4